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Blue Ridge Technical Institute

FLAT ROCK,
NORTH CAROLINA

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GENERAL CATALOG

1975-1976

Blue Ridge Technical Institute is an open door nondiscriminatory institution.

General Catalog
1975-1976
Volume 5

Blue Ridge Technical Institute

Flat Rock, North Carolina

Table of Contents

Board of Trustees 3
Academic Calendar 4
Administrative Offices and Staff 6
Faculty 8
General Information 10
Admission Procedures and Entrance Requirements 12
Fees and Expenses 14
Financial Aid 16
Academic Regulations 18
Other Student Services 23
Degree and Diploma Programs 24
Agriculture and Engineering Division 25
- Industrial Engineering Technology 25
- Mechanical Drafting and Design Technology 26
- Orchard Management and Horticulture 28

Business Division 31
- Business Administration Technology 31
- Executive Secretarial Technology 34
- General Office Technology 35

General Education Division 38
Vocational Division 40
- Auto Body Repair 40
- Carpentry and Cabinetmaking 41
- Automotive Mechanics 43
- Electrical Installation and Maintenance 44
- Industrial Mechanics 46
- Machinist 47
- Practical Nursing Education 48
- Welding 49

Continuing Education 53
- Occupational Extension 54
- Management Development Program 55
- New and Expanding Industry Training 55
- Adult Basic Education 55
- Adult High School 56
- High School Equivalency Tests 56
- Community Services 56
- Learning Centers 58
- Human Resources Development Program 59

Course Descriptions 60

Board of Trustees

John Gregory, Chairman

Appointed by the Governor

	Expiration of Term
Frank W. Ewbank	June 30, 1979
Pat Whitmire	June 30, 1977
A. J. Henderson	June 30, 1983
Bill Prim	June 30, 1981

Appointed by Henderson County Commissioners

Malachi Goforth	June 30, 1981
Barclay B. Orr	June 30, 1979
Edwin R. Groce	June 30, 1977
Robert Graybeal	June 30, 1983

Appointed by Boards of Education

Hugh D. Randall	June 30, 1981
J. M. Foster	June 30, 1979
John Gregory	June 30, 1977
Mrs. Frank Drake	June 30, 1983

Academic Calendar

Fall Quarter

Orientation For New Students	September 26
Registration — Day Students	September 29
Registration — Evening Students	September 29, 30
Classes Begin	September 30
Last Day to Drop or Add Classes	October 13
Pre-Registration Begins	December 1
Last Day of Classes	October 6

Thanksgiving Holidays: November 27 through November 30, inclusive. Christmas Holidays for students: December 18 through January 1, inclusive. Christmas Holidays for faculty and staff: December 20 through January 1, inclusive.

Winter Quarter

Registration — Day Students	January 2
Registration — Evening Students	January 5, 6
Classes Begin	January 5
Last Day to Drop or Add Classes	January 9
Pre-Registration Begins	March 1
Last Day of Classes	March 19

Spring Quarter

Registration — Day Students	March 25
Registration — Evening Students	March 25, 29
Classes Begin	March 26
Last Day to Drop or Add Classes	April 1
Pre-Registration Begins	May 31
Last Day of Classes	June 14
Graduation	June 15

Easter Holidays: April 16 through April 19, inclusive.

Faculty Vacation

June 17 through June 30, inclusive.

Summer Quarter

Registration — Day Students	July 6
Registration — Evening Students	July 6, 7
Classes Begin	July 7
Last Day to Drop or Add Classes	July 13
Pre-Registration Begins	September 7
Last Day of Classes	September 22
Graduation	September 23

Independence Day Holiday: July 5
Labor Day Holiday: September 6

1975

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Administrative Offices and Staff

OFFICE OF THE PRESIDENT

Dr. William D. Killian . . . . **President**
B.S., M.A., Appalachian State University; B.S., North Carolina State University at Raleigh; Ed.D., North Carolina State University

James L. Morton . . . . **Director of Public Information**
B.A., DePauw University

Patricia C. Hutchinson . . . . **Secretary to the President**
East Henderson High School

Bobbie Garren . . . . **Receptionist**
East Henderson High School

OFFICE OF INSTRUCTION

Robert F. Hill . . . . **Director of Occupational Education**
B.S., M.A., Appalachian State University

Harold McLaughlin . . . . **Director of Adult Education**
B.S., Western Carolina University; M.A., North Carolina State University at Raleigh

Joseph C. Morrow . . . . **Director of Extension Programs**
B.S., M.S., Western Carolina University

David Bethea . . . . **Evening Director**
B.S., United States Military Academy, West Point.

Clarence Goode . . . . **Director of Special Programs**
B.S., Western Carolina University; M.A., Appalachian State University

Betty Ferris . . . . **Coordinator, Campus Learning Center**
B.S., Western Carolina University; M.A., Appalachian State University

Cynthia Shay . . . . **Coordinator, Transylvania Learning Center**
B.A., Kansas State University

Brenda Elliot . . . . **Evening Coodinator, Campus Learning Center**
B.A., Berea College

Yvonne Conner . . . . **Recruiter/Counselor**
Cecil's Business College

William H. Stewart . . . . **Coordinator, HRD and Fire Service Programs**
B.A., University of North Carolina

Minnie L. Tomlinson . . . . **Secretary**
A.A.Sc., Blue Ridge Technical Institute

Joann Collins . . . . **Secretary**
North Miami Adult Education Center; Blue Ridge Technical Institute

Kay B. Gevedon . . . . **Secretary**
A.A.Sc., Blue Ridge Technical Institute

Betty Causey . . . . **Secretary**
Blue Ridge Technical Institute

Ann Pepper . . . . **Secretary**
University of Tennessee; Draughon's Business College

Vickie Saunders . . . . **Secretary**
Blue Ridge Technical Institute

OFFICE OF STUDENT PERSONNEL

Danny H. Bost . . . . **Director of Student Personnel**
A.A., Brevard Junior College; A.B., Catawba College; M.A., Appalachian State University

L. H. Lawing . . . . **Registrar**
A.B., University of North Carolina at Chapel Hill; M.Div., Th.M., Duke University

Jacqueline Lancaster . . . . **Counselor**
B.S., Western Carolina University; M.A., West Virginia University

Frank L. Simpson . . . . **Veterans Representative**
B.S., Western Carolina University

Stephanie P. King . . . . **Secretary**
A.A.Sc., Blue Ridge Technical Institute

OFFICE OF THE BUSINESS MANAGER

Hal A. Sain . . . . **Business Manager**
B.S., Western Carolina University

Paula R. Rummage . . . . **Accountant**
Commercial Certificate, University of North Carolina at Greensboro

Judy A. Lawrence . . . . **Accounting Clerk**
East Henderson High School

Maxine Case . . . . **Accounting Clerk**
Bob Jones University

Dianna Maxwell . . . . **Accounting Clerk**
Gardner-Webb College

Beverly B. Capps . . . . **Purchasing Clerk**
West Henderson High School

Ronald G. Dellinger . . . . **Groundskeeper**
Diploma, Asheville-Buncombe Technical Institute

Terry Jackson . . . . **Groundskeeper/Custodian**
Dana High School

Johnnie L. Landrum . . . . **Custodian**
Twenty-Eight Years Experience

Eugene Waters . . . . **Custodian**
Diploma, Blue Ridge Technical Institute

Faculty

AGRICULTURE AND ENGINEERING TECHNOLOGY DIVISION

A. J. Nielsen . . . . **Division Chairman; Orchard Management, Physical Science**
B.S., M.S., North Carolina State University at Raleigh

Charles L. Boyd . . . . **Orchard Management**
B.S., M.Ed., North Carolina State University at Raleigh

Fred H. Niehoff, Jr. . . . . **Industrial Engineering**
B.I.E., General Motors Institute; M.A., Appalachian State University

Thomas L. Wells . . . . **Drafting and Design**
B.S., Western Carolina University; M.A., Appalachian State University

BUSINESS TECHNOLOGY DIVISION

Earl D. Medlin . . . . **Division Chairman; Business Administration**
B.S., M.A., Western Carolina University

Ann H. Boyd . . . . **Business Administration**
B.S., Mars Hill College; North Carolina State University at Raleigh

Zona J. Elkins . . . . **Business Administration**
B.A., Catawba College; M.S., Syracuse University

Jenell N. Hebert . . . . **General Office Technology**
B.S., Auburn University

Linda C. Gardner . . . . **Executive Secretarial Technology**
B.A., Pennsylvania State University; M.S., Western Carolina University

GENERAL EDUCATION DIVISION

Peake A. Dana . . . . **Division Chairman; English**
B.A., Old Dominion University; M.A., University of North Carolina at Chapel Hill

Harold P. Hamrick . . . . **Mathematics, Science, Electronics**
A.B., Wofford College; B.S.E.E., North Carolina State University at Raleigh

David M. Holcombe . . . . **Social Science**
B.S., Appalachian State University; M.A., Wake Forest University

Raymond F. Rudell . . . . **Mathematics**
B.S., University of Maryland; M.S., North Carolina State University at Raleigh

Eugene Wittman . . . . **French, Spanish**
B.A., St. Bonaventure University; M.A., University of South Tampa

LIBRARY SERVICES DIVISION

Rosalind C. Campbell .... **Division Chairman; Head Librarian**
A.B., Emory and Henry College; M.A., Appalachian State University

Marjorie Willcox **Evening Librarian**
B.A., William Smith College; M.A., Columbia University

Lois G. McKinnish **Library Assistant**
North Greenville Junior College; Furman University; Spartanburg Junior College

VOCATIONAL DIVISION

Albert L. Worley .... **Division Chairman; Machine Shop**
Company and State Certificates, Newport News Apprentice School; Asheville-Buncombe Technical Institute

Allan G. Purvis **Electrical Installation and Maintenance**
Ridgetown College of Agricultural Technology, Canada; Vocational & Technical Education, FTL. Florida; Allstate Construction College, Miami, Florida

Irland V. Brown **Automotive Mechanics**
Diploma, Suspension and Frame Straightening, Bear Training School; Certified Ford Technician, Ford Motor Company

Isabelle C. Reed **Practical Nursing Education**
B.S. in Nursing, Montreat College; Diploma, Memorial Mission Hospital School of Nursing

H. Ralph Wood **Welding**
Diplomas in Machine Shop, Drafting, and Welding, Caldwell Community College and Technical Institute; Appalachian State University

ARTIST IN RESIDENCE

Charles DuVall **Classical Guitar**
Shorter College; Master classes under Parkening, Silva, and Guthrie

General Information

History

In 1963, the North Carolina General Assembly authorized a system of comprehensive community colleges and technical institutes to be established in areas of the state where a definite need for such an institution was shown. On the basis of this need and through the combined efforts of interested citizens in Henderson County, Blue Ridge Technical Institute was established as Henderson County Technical Institute in May of 1969. At this time, the citizens of Henderson County approved a bond issue and a special tax levy which provided funds for the construction, operation, and maintenance of a school plant for the institute.

Blue Ridge Technical Institute is one of fifty-seven similar institutions which operate under the North Carolina State Board of Education and the Department of Community Colleges. The school's local board of trustees were administered the oath of office on September 9, 1969. The institution began operation on December 1, 1969, with the first course being offered on January 8, 1970. The first full-time curriculum classes began on September 14, 1970. The board of trustees voted to change the name from Henderson County Technical Institute to Blue Ridge Technical Institute on October 12, 1970.

Institutional Purpose

Blue Ridge Technical Institute operates under an "open door" policy. That is, its doors shall be open to anyone of suitable age who can profit from what is being offered by the institution. This policy is based on the belief that this institute has something to offer all individuals regardless of their previous experience, and that through effective guidance, individuals can find their places in available educational programs.

The purpose of the institute is to extend educational opportunities beyond those presently being offered in the elementary and secondary public schools. These opportunities shall be in the form of technical, vocational, and adult education, and they shall be available for students who are high school graduates or who are beyond the compulsory age limit of the public school system and who have left the public schools.

Underlying this entire purpose is the principle that the institute will endeavor to work with the student at his own level of ability and experience as long as the student continues to demonstrate interest. Developmental programs and special instruction will be extended to all students to aid them in continuing toward their desired educational goals. It is the institute's policy that the "open door" will not become a "revolving door."

The objectives of this stated purpose are:

1. To prepare students for occupations requiring varying levels of ability and skill through technical and vocational programs;

2. To enable adults who need training or retraining to stay abreast of changing technologies through occupational upgrading programs;

3. To provide for adults who would not otherwise continue their education expanded educational opportunities from the first grade through high school in the form of adult basic education and high school equivalency programs;

4. To meet general adult and community service needs through a variety of avocational, general educational, and enrichment programs.

Location and Facilities

Blue Ridge Technical Institute is occupying a new facility on a 109-acre campus. The campus is located on Blue Ridge Tech Road, which connects Airport Road and Allen Road, two and a half miles southeast of Hendersonville, Henderson County, North Carolina. A three-building complex provides 45,000 square feet of floor space, divided into shop and laboratory space, classrooms, library and learning laboratory, office and reception space, and student lounge area. The Institute also offers classes in its Adult Education Center in the former Flat Rock Junior High School building and in the Transylvania, Morgan Street Center, the campus of Brevard Junior College, Brevard, North Carolina.

Situated near the Blue Ridge in the mountain province of North Carolina at an altitude of 2,140 feet, the institute is easily accessible over Interstate 26, Highways 64, 25, 191, 176. Commercial air service is provided by several major airlines which serve the Asheville Airport located twelve miles north of Hendersonville.

The institute's location between the metropolitan areas of Asheville, North Carolina, and Greenville — Spartanburg, South Carolina, place it near the center of a rapid growth area in southwestern North Carolina. This location is also near several summer resort developments which include Flat Rock, the Pisgah National Forest, Brevard, the Bat Cave — Chimney Rock area, and the Blue Ridge Parkway.

Accreditation

Blue Ridge Technical Institute is fully accredited by the Commission on Colleges of the Southern Association of Colleges and Schools. The Southern Association of Colleges and Schools is a regional accrediting agency for the purpose of identifying and accrediting institutions which meet the standards for quality and scope of higher education.

The institution is an accredited member of the North Carolina Department of Community Colleges and all programs offered by the Institute have been approved by the North Carolina State Board of Education. The Practical Nursing Program has been fully accredited by the North Carolina State Board of Nursing.

Admission Procedure And Entrance Requirements

General Admission Requirements

In keeping with its established "open door"policy, Blue Ridge Technical Institute does not impose restrictive standards for admission.

Although practically all applicants will be admitted to the institution, the student will be required to meet selected minimum requirements before admission to a specific curriculum will be granted. Any deficiencies can be completed through courses available at Blue Ridge Technical Institute. This permits the retention of quality in each curriculum and is also beneficial for the applicant by providing a program in which the applicant is capable of making satisfactory progress.

For admission, high school graduation or its equivalency is recommended. If applicants have not graduated from high school or otherwise fulfilled this requirement, they may do so by successfully completing the General Educational Development Tests (GED) prior to graduation from Blue Ridge Technical Institute.

A student is officially admitted to a curriculum when all requirements are met and the student receives written notification from the Director of Student Personnel.

Specific Admission Requirements

All applicants for admission to a pre-employment technology or vocational program are responsible for fulfilling the following steps:

1. File a completed application for admission form with a $10.00 tuition deposit. The deposit is non-refundable but will be applied to tuition fees the first quarter the applicant is enrolled if within one year from the date the deposit is received.

2. Have records of all previous education mailed to the institute. Applicants who have the high school equivalency certificate should submit a copy of the certificate but should also ask their high school to send transcripts of all work done at the school. *All transcripts must come directly from the school to the technical institute.*

3. Schedule a personal interview with the Director of Student Personnel Services or one of his assistants.

In addition to meeting the specific admission requirements, all Practical Nursing applicants should complete the following requirements in compliance with the North Carolina Nursing Practice Act:

1. Complete a battery of pre-entrance tests.

2. Supply three character references.

3. Complete physical and dental exams.

4. Schedule a personal interview.

Application for the Practical Nursing Program should be made before the end of the Winter Quarter preceding the Fall Quarter for which enrollment is requested.

Readmission

Students with credit from Blue Ridge Technical Institute who withdraw for any reason before completing the requirements for a diploma or degree may be readmitted by simple application and a conference with the counselor.

Admission of Out-Of-State Students

Out-of-state students are admitted under the same regulations as North Carolina residents.

Admission of Transfer Students Outside BRTI

Blue Ridge Technical Institute will accept credits from all institutions within the Department of Community Colleges as well as from other accredited colleges, technical institutes, and business and vocational schools. Credits earned at other institutions may be transferred into programs at BRTI provided grades meet institutional academic standards. The content of the course being transferred must parallel the content of similar courses offered at Blue Ridge Tech. Initial credit for transfer work will be granted by letter within 55 school days after the student enrolls in a particular curriculum.

Admission of Provisional Students

Students applying too late to furnish pre-entrance requirements before the registration period may be permitted to enter the Institute as a provisional student after an interview with the Director of Student Personnel or counselors. Once students have fulfilled all admission requirements (application, transcripts, and interview), they will be admitted in good standing. All students must fulfill these requirements by the end of their first quarter.

Fees and Expenses

General Fees

A major objective of Blue Ridge Technical Institute is to provide quality education at the lowest possible cost for the student. Tuition and fees paid by students are kept at a minimum and do not represent the total operating expenses of the institute. The balance is provided by local, state, and federal tax funds.

Quarterly registration fees are payable at the time of registration and include all charges applicable to the quarter. These fees are as follows:

Tuition per Quarter	$33.00
Full-time or part-time student (cost per quarter hour)	2.75
Student Activity Fee, per Quarter	4.00
Graduation Fee	15.00
Late Registration	5.00
Insurance	3.50

For tuition purposes, a full-time student is one who is enrolled for 12 credit hours or more. Credit hours may be computed by the following formula:

1 class hour	1 credit hour
2 lab. hours	1 credit hour
3 manipulative lab. hours	1 credit hour

Activity Fee

All curriculum day and afternoon students taking three or more courses will pay a student activity fee of $4 per quarter at the time of registration. A student desiring to participate in student activities taking less than three courses per quarter or evening students will make this known and pay the same fee at the time of registration. THIS FEE IS NOT REFUNDABLE.

Insurance

Accident insurance, covering hours in school and transportation to and from school and school sponsored activities is available for $3.50 per year through Blue Ridge Technical Institute. Students required or others desiring this insurance will make payments at Fall Quarter registration and at other designated times. All students enrolled in shop or science lab courses and all students participating on athletic teams representing Blue Ridge Technical Institute are required to take this insurance. This requirement will be waived only if the required student produces evidence that he is covered by similar accident insurance coverage. THIS INSURANCE IS NOT REFUNDABLE.

Textbooks and Supplies

Students are required to have the necessary textbooks and supplies prescribed in the curriculum area they are entering. The institute operates a bookstore where these textbooks and supplies may be purchased. The cost of textbooks and supplies will vary according to the program of study with the average cost varying from $25 to $75. No textbook purchased from the bookstore can be returned for refund unless the course for which it was purchased fails to materialize.

Graduation Fee

Graduation expenses for diploma, cap, and gown are payable at the beginning of the quarter in which the student expects to complete a course of study.

Refund Policy

Tuition refund to a student shall not be made unless the student is, in the judgment of the institution, compelled to withdraw for unavoidable reasons. In such cases, two-thirds (2/3) of the student's tuition may be refunded if the student withdraws within ten calendar days after the first day of classes as published in the school calendar. Tuition refunds will not be considered for tuition of five dollars ($5.00) or less, except if a course or curriculum fails to materialize, tuitions of all students enrolled for such shall be refunded.

Where a student, having paid the required tuition for a quarter, withdraws from the institution before the end of the quarter and the reasons for the withdrawal are found excusable by the institution's administration, the student may be allowed credit for unrefunded tuition upon application for readmission during any of the next four calendar quarters by petitioning in writing to be allowed such credit.

Where a student, having paid the required tuition for a quarter, dies during that quarter, (prior to or on the last day of examinations of the institution), all tuition for that quarter may be refunded to the estate of the deceased.

No tuition refund will be made to students who withdraw without official authorization or who are dismissed for cause.

Fulfillment of Financial Obligations

No degree, diploma, certificate, or course credit will be granted, nor will a transcript be provided for a student until all financial obligations to the institute, other than student loans, have been paid.

All previously incurred expenses and accounts, including library fines, must be fully paid before a student may re-enter at the beginning of any quarter.

Financial Aid

General Information

Students in need of financial aid can receive assistance from scholarship funds, loan funds, and the federal work-study program. Additional funds are available for veterans, children, or widows of deceased veterans, and disabled or handicapped persons. Application for financial assistance should be filed with the office of Student Personnel Services when making application for admission to the Institute.

Scholarships

Limited scholarship funds are available for students in need of financial assistance. These funds have been made available by interested citizens and local civic organizations. Information concerning these scholarships is available in the office of Student Personnel Services.

Loans

Low-interest student loans are available through the College Foundation, local civic organizations, and area banking institutions. Interested students who indicate financial need should contact the Student Personnel Office for further information regarding a loan.

Vocational Work-Study Program

A limited number of students may be employed on a part-time basis by the institute under the provisions of the federal work-study program. Applicants for work-study must be under 21 years of age and show that earnings are needed to commence or continue training at the institute on a full-time basis.

College Work-Study Program

Blue Ridge Technical Institute participates in the College Work-Study Program which provides on-campus work opportunity for students needing financial assistance to attend school. Work is available for students to assist in the library, faculty and administrative offices, bookstore, laboratories, shops, and building maintenance. Students working under this program are paid in cash each month for the work performed.

Vocational Rehabilitation

Vocational Rehabilitation offers services necessary to enable a physically or mentally employment-handicapped person to become self-supporting. Eligible handicapped persons may receive financial assistance while enrolled at Blue Ridge Technical Institute.

Prospective students having a physical disability who desire to apply for training under the provisions or this program should contact the Division of Vocational Rehabilitation Office in Hendersonville.

Veterans, War Orphans, Widows, and Wives, Educational Assistance

All programs offered by Blue Ridge Technical Institute are approved for training under the provisions of Title 38, U.S. Code (GI Bill of Rights). To be classified as a full-time student, a Veteran must register for 12 quarter hours in a technical curriculum or 30 clock hours per week in a vocational curriculum.

Academic Regulations

Degrees, Diplomas, and Certificates

The Associate in Applied Science Degree (A.A.Sc.) is awarded to graduates in two-year technical programs. This degree is conferred in the name of the North Carolina State Board of Education and Blue Ridge Technical Insitute.

The Associate in General Education Degree (A.G.E.) is awarded to graduates in the General Education program.

A State Diploma issued in the name of the North Carolina State Board of Education and Blue Ridge Technical Institute is awarded candidates who successfully complete a one-year vocational program of study.

Certificates are issued in the name of Blue Ridge Technical Institute to students who successfully complete any short-term program of study.

Unit of Credit

The unit of credit at Blue Ridge Technical Institute is the quarter hour. The school year consists of four quarters each containing fifty-five class days. For the credit value of a given course, consult the course descriptions in this catalog.

Registration

Procedures for registration will be provided for the student prior to the beginning of each quarter. Dates of registration are listed in the calendar in this catalog, and students are expected to register on the day or days specified for each quarter. No registrations of continuing students (students enrolled prior quarter) are permitted in credit classes after the last day of registration as published in the school calendar. No registration of new students (those enrolling for the first time at the Institute) are permitted in credit classes after the last day for adding or dropping classes as listed in the school calendar.

Changes in schedules must be approved by the student's faculty advisor and arranged through the office of The Registrar.

Registration for non-credit classes is usually held at the first class meeting of the course.

Special Studies

Students may enroll for individual curriculum classes and be classified as special students. Credits earned by such students may be applied to a degree or diploma depending upon the level of such work. Permission to register as a special student is granted at the discretion of the office of Student Personnel Services. Enrollment in a specific class is granted with the stipulation that full-time curriculum students have first priority to the class.

Auditing

A student who audits a course pays the registration and tuition fees. Auditors do not take tests or examinations, nor do they receive grades or credit, and they cannot later change the "audit" to credit.

Grading System

Grades issued by the institute are based upon quality of achievement of the objectives of the course being taken. The following system of letters will be used for recording student achievement:

Grade	Significance
A	Represents work of definitely superior quality and is reserved for the few outstanding students. It is distinctly the honor mark.
B	Represents work of excellent quality and is recorded for those who do work which is clearly above the average.
C	Represents work of average quality and is recorded for those students who do average work.
D	Represents work which is below the average but above failure.
F	Represents work that is not of an acceptable quality. This grade will be assigned to all students who withdraw after the seventh week.
WP	Represents withdrawal from a course with a passing grade. Cannot be granted if student withdraws after the seventh week of the quarter.
WF	Represents withdrawal from a course with a failing grade. Cannot be granted if student withdraws after the seventh week of the quarter.
Y	Represents the auditing of a course. No credit received.

Student Records, Grade Changes, and Mid-Term Reports

All grades are recorded in a student's official transcript at the completion of each quarter. The student will be furnished with a report of these grades.

Once grades have been awarded, they may be changed only with the written authorization of the instructor and the approval of the Director of Occupational Education.

The instructor shall be responsible for providing each student with mid-term status report whenever the student's progress becomes unsatisfactory. A copy of this report should also be given the students' advisor so that proper counseling may be provided.

A 5-day notice is required of students who request an official transcript from the Registrar. All requests must be presented in writing by the student.

Incompletes

Incomplete indicates failure to complete certain course requirements because of extenuating circumstances. All incompletes must be removed before the end of the succeeding term or the incomplete automatically becomes a failure. Two or more incompletes in a quarter will result in the student being required to carry a reduced load the following quarter. Students with three or more incompletes may register for the following quarter by special permission only.

Withdrawals

The official dropping of a course must be arranged through the office of Student Personnel Services. Failure to officially withdraw from a course may result in the loss of re-entry privileges for one year and all grades for the quarter being entered as failing.

Withdrawals made prior to the end of the seventh week will result in the student receiving a WP or WF depending upon the status of the student's grades at the time of withdrawal. Official withdrawals may not be made after the seventh week except in case of emergency situations.

Graduation Requirements

The student will be held responsible for fulfilling all requirements for the degree or diploma. To meet these requirements, the student must:

1. Have at least an overall passing average and a passing grade on all required courses.

2. Apply to the office of Student Personnel Services for the degree or diploma at the beginning of the last quarter of enrollment. The application should be accompanied by the required graduation fee.

3. Fulfill all financial obligations to the institution.

4. Complete a minimum of one-half the required credit hours as a resident student at Blue Ridge Technical Institute. The final fifteen credit hours of study prior to graduation must be completed at the Institute unless special permission is obtained from the Office of Student Personnel Services.

All candidates for graduation are required to participate in graduation exercises to receive the degree or diploma unless excused by the Director of Student Personnel Services.

Attendance

Regularity of class attendance is necessary in order to receive maximum benefits from the program offered and for maintenance of a satisfactory academic record. Whenever a student's attendance or punctuality record endangers his own success or that of other students, he may be dropped from the course. Absences will be considered justifiable and excusable only in cases of emergencies, serious illness, or death in the immediate family. *A student will be dropped after he has accumulated five unexcused absences.* Two tardies will also constitute an unexcused absence. A grade WP or WF will be assigned when a student is dropped for excessive absences.

A student is expected to confer with each instructor before anticipated or after unavoidable absences. The instructor will determine if the excuse is justifiable and inform the student of his decision. The instructor shall also be responsible for informing the office of Student Personnel Services when a student's absences have become excessive.

The responsibility of making up work missed when student's absences are excused rests entirely with the student. Unexcused absences will result in a zero for the work missed.

Student Conduct

A student enrolled at Blue Ridge Technical Institute may rightfully expect that the teachers and administrators will maintain an environment in which there is freedom to learn. This requires that there be appropriate conditions and opportunities in the classroom and on the campus.

Students at Blue Ridge Technical Institute assume an obligation to conduct themselves in a manner compatible with the institute's function as an educational institution. It is expected that the student will adhere to the rules and regulations as may be established by the institute and the student body, and that the student will respect the rights, privileges, and property of other members of the institutional community. Students are responsible for their own conduct and violation of established rules and regulations may subject them to disciplinary measures or dismissal.

Transfer to Another Program Within BRTI

All transfers within the institution will be carefully considered on an individual basis, with special attention being given to the student's past academic record, observed motivations, interest, vocational and educational objectives.

Students granted internal transfers of program will be given credit for courses taken in their previous programs that are comparable to courses offered in their new programs, provided their grades meet minimum institutional academic standards.

Academic standing in the new curriculums will be computed only on grades allowed to transfer and all course work taken in the new curriculum.

Advanced Placement Examinations

Students who can demonstrate abilities in a subject area may request an advanced placement examination in order to accelerate their studies. Any student desiring an advanced placement examination must make application with the Registrar. The application must be filed and the examination completed within fifty-five days after the student first enrolls in a particular curriculum at the institution.

Credit by advanced placement examination shall not exceed 40% of the total credit hours required for graduation. Hours credit earned by examination will count toward graduation; these hours will not be used in computing quality point averages. Advanced placement tests will be arranged by the Registrar with the subject area instructor. The subject area instructor's decision will be final.

Subject area instructors will, when requested by the Registrar, prepare an examination to test these students' proficiency in a given subject. This examination will be placed on file with the registrar and retained for use for one calendar year from the date of examination. In the event an examination in the same subject area has expired, the subject area instructor may elect to use the examination file, or he may prepare a new examination.

Academic Probation and Suspension

Regularly enrolled students are placed on academic probation if their cumulative grade-point average is less than 1.0 in any quarter. When a student's cumulative grade-point average does not meet the minimal level, academic probation will go into effect for one quarter. If the average is not raised to acceptable standards by the end of the probationary quarter, the student will be placed on academic suspension for a period of one quarter. At this time, the student may enroll in developmental or learning center programs for the purpose of preparing for readmission to the same or other curricula under the probationary restrictions. Readmission to the same or to new curricula may not be made until the lapse of one academic quarter.

Under special circumstances, a student may appeal academic suspension to the full faculty council which can by majority vote recommend that the student be allowed to continue in another program without the suspension period.

Second Degrees or Diplomas

No student may be a candidate for more than one associate degree or diploma at a time. However, a graduate who holds one associate degree may earn a second associate degree by taking additional work equal to at least one-half of the total credit hours for the second degree and by meeting all requirements for the degree. A graduate who holds one diploma may earn a second diploma by taking additional work equal to at least one-half of the total credit hours for the second diploma and by meeting all requirements for the diploma.

A student may declare a double major and upon completion of all required courses for each major receive the associate degree or diploma depending upon the division in which the student is enrolled.

Grade-Point Average

The grade point is used to evaluate the student's scolarship record. Credit points are allocated to credit hours earned as follows:

A	4 grade points for each credit hour
B	3 grade points for each credit hour
C	2 grade points for each credit hour
D	1 grade point for each credit hour

Unless a course is repeated, a qualitative index of the student's scholarship, or grade-point average, is obtained by dividing the total number of grade points earned by the total number of credit hours attempted. This index or ratio is referred to as the grade-point average. For example, if a student has earned 136 grade points on 48 hours attempted, the grade point average is 136 ÷ 48 or 2.833.

In order to improve the ratio, a student may elect to repeat courses in which the grade assigned has been D or F. When a course is repeated for credit, only the grade points and the credit hours earned the last time the course is taken will be used in computing the grade-point average. However, failing grades cannot be removed from a student's record and the records will show all grades for all courses taken.

Other Student Services

Guidance and Counseling

Counseling services are available for students who desire assistance with vocational, educational, or personal problems. All interviews with the counselor are conducted in strict confidence.

In addition, each student is assigned a faculty advisor who will assist in planning class schedules, in registration, and in other problems which might arise. Students are urged to consult their advisors when problems develop.

Placement Services

Although Blue Ridge Technical Institute does not guarantee placement upon graduation, every effort will be made to help students find suitable employment. Records of interested employers will be maintained, and interviews with prospective employers will be arranged. There will be no charge to industry or students for this service.

Housing

Although the institute does not provide housing, an active file of available housing is maintained, and assistance in locating suitable living quarters for students will be provided.

Foreign Students

The Institute is authorized under Federal law to enroll non-immigrant alien students. An immigrant is subject to the same considerations as a citizen.

Testing

Included in the counseling program are individual and small group tests which may be given on student request, and/or on the recommendation of a counselor.

Changes in Regulations

Blue Ridge Technical Institute reserves the right to make changes in the regulations, courses, fees, and other matters of policy and procedure whenever it is deemed necessary.

Degree and Diploma Programs

The curriculum division of Blue Ridge Technical Institute offers fifteen one and two-year programs leading to either the associate degree or the vocational diploma. Courses offered within this division are organized on the quarter system, each quarter consisting of eleven weeks of fifty-five school days. The types and lengths of various programs offered are as follows:

Associate in Applied Science Degree (Day) — Seven Quarters
Associate in Applied Science Degree (Evening) — Eight Quarters
Associate in General Education Degree (Day) — Six Quarters
Vocational Diploma (Day) — Four Quarters
Vocational Diploma (Evening) — Eight Quarters

The following curricula will be offered at Blue Ridge Technical Institute during the 1975-76 school year:

Associate Degree Curricula

Business Administration Technology*
Executive Secretarial Technology
General Education
General Office Technology*
Industrial Engineering Technology
Mechanical Drafting and Design Technology
Orchard Management and Horticulture

Vocational Diploma Curricula

Automotive Body Repair**
Automotive Mechanics
Carpentry and Cabinetmaking**
Electrical Installation and Maintenance*
Industrial Mechanics**
Machinist
Practical Nursing Education
Welding*

*Offered in both daytime and evening programs
**Offered in evening program only

All degree and diploma programs offered at Blue Ridge Technical Institute are classified in four divisions: two technical, one general education, and one vocational. These divisions are:

Agriculture and Engineering Division
Business Division
General Education Division
Vocational Division

Agriculture and Engineering Division

Industrial Engineering Technology, T- 047

The Industrial Engineering Technology curriculum is designed for students interested in the manufacturing phase of industry. It is offered as a late afternoon program to afford full-time employees an opportunity to prepare for a more challenging career and for advancement opportunities.

The curriculum provides basic training in the application of inspection, time and motion study, production planning, materials handling, plant layout, quality control, and cost of a modern manufacturing enterprise. The graduate of this curriculum should have a basic knowledge of engineering at the technology level with specific skills in performing industrial engineering functions. The student receives instruction in industrial safety, job analysis and evaluation, work measurement, and quality control techniques. In addition, instruction in such related subjects as physics, technical drafting, manufacturing processes, and production planning is offered. Basic training in oral and written communications will give graduates a background for developing their potential in such areas as specification writing and supervision.

The industrial engineering technician studies and records time, motion, methods, and speed involved in performance of maintenance, production, clerical, and other work operations to establish standard production rate and to improve efficiency. He prepares charts, graphs, and diagrams to illustrate work flow, routing, floor layouts, building handling, and machine utilization.

The following are typical titles of positions held by graduates in Industrial Engineering Technology: methods analyst, production planner, inspector, quality control analyst, cost estimator, plant layout draftsman, production scheduler, analyst, time study observer, and standards analyst. In addition, the technician is prepared to move into manufacturing supervision because of the technical training received.

Graduates of this program at Blue Ridge Technical Institute will be prepared to enter this challenging field with its wide variety of opportunities.

Curriculum by Quarters

Course No.	Course Title	Hours Per Week Class	Hours Per Week Lab	Quarter Hours Credit
FIRST QUARTER				
MAT 104	Review of Mathematics	4	0	4
ENG 101	Communication Skills I	3	0	3
ISC 120	Principles of Industrial Management	4	0	4
MEC 106	Machine Processes	2	2	3
		13	2	14
SECOND QUARTER				
MAT 112	Advanced Algebra	4	0	4
ENG 102	Communication Skills II	3	0	3
DFT 121	Technical Drafting I	2	2	3
MEC 107	Manufacturing Processes	4	0	4
		13	2	14

THIRD QUARTER

MAT	113	Basic Trigonometry	4	0	4
ENG	103	Report Writing	3	0	3
DFT	122	Technical Drafting II	2	2	3
ISC	104	Methods Engineering	4	0	4
			13	2	14

FOURTH QUARTER

MAT	201	Applications in Trigonometry	4	0	4
		Social Science Elective	3	0	3
DFT	201	Technical Drafting III	2	2	3
MEC	203	Industrial Materials	4	0	4
			13	2	14

FIFTH QUARTER

ENG	200	Oral Communications	3	0	3
DFT	202	Technical Drafting IV	2	2	3
ISC	203	Plant Layout	2	2	3
MAT	202	Applied Statistics	4	0	4
			11	4	13

SIXTH QUARTER

PHY	201	Physics I	2	2	3
ISC	208	Production Planning	4	0	4
BUS	272	Principles of Supervision	3	0	3
EDP	201	Introduction to D/P Systems or Elective	3	2	4
			12	4	14

SEVENTH QUARTER

PHY	202	Physics II	2	2	3
		Social Science Elective	3	0	3
ISC	202	Quality Control	4	2	5
BUS	201	Business Finance I or Elective	3	0	3
			12	4	14

EIGHTH QUARTER

PHY	203	Physics III	2	2	3
ISC	216	Time and Motion Study	4	2	5
BUS	233	Personnel Management	4	0	4
ISC	201	Industrial Safety	2	0	2
			12	4	14

Total Credit Hours Required 111

* Manipulative laboratory involves development of skills and job proficiency. Credit of one quarter hour for each three hours of laboratory.

** At least 50% of hours in electives must be selected from major area of study.

Mechanical Drafting and Design Technology, T-043

Mechanical drafting and design technicians translate the ideas, rough sketches, specifications, and calculations of designers and engineers into accurate working drawings which are used by skilled machinists and tool makers to make product models, tools, and fixtures. The technician may be involved in calculating the strength, reliability, and cost of materials, or he may produce drawings and specifications which graphically describe exactly what materials and processes are to be used on a particular job. He must also be able to use engineering handbooks and tables that will assist him in solving technical problems.

Primary employers of mechanical drafting and design technicians are the machinery, electrical equipment, fabricated metal products, and transportation equipment industries. Nonmanufacturing industries such as engineering and architectural consulting firms, construction companies, and public utility companies also employ large numbers of mechanical drafting technicians. As these technicians gain skill and experience, they may advance to positions of checkers, detailers, senior draftsmen, or supervisors. Many, who have gained experience and have creative ability, will become designers of tools, jigs and fixtures, dies, and production items. Others will transfer into engineering positions. The increasingly complex design problems of modern products and processes will continue to keep the demand for trained mechanical drafting and design technicians as supporting personnel at a high level.

Curriculum by Quarters

Course No.		Course Title	Hours Per Week		Quarter Hours
			Class	Lab	Credit
FIRST QUARTER					
MAT	100	Technical Mathematics I	5	0	5
ENG	101	Communication Skills I	3	0	3
DFT	101	Drafting I	3	9*	6
EGR	101	Introduction to Engineering Technology	3	0	3
MEC	101	Machine Processes I	3	3*	4
			17	12	21
SECOND QUARTER					
MAT	102	Technical Mathematics II	5	0	5
DFT	102	Drafting II	3	9*	6
PHY	101	Physics: Properties of Matter	3	2	4
ENG	102	Communication Skills II	3	0	3
			14	11	18
THIRD QUARTER					
ENG	103	Report Writing	3	0	3
MAT	103	Technical Mathematics III	5	0	5
DFT	103	Drafting III	3	9*	6
PHY	102	Physics: Work, Energy, Power	3	2	4
			14	11	18
FOURTH QUARTER					
MAT	203	Technical Mathematics IV	5	0	5
DFT	205	Design Drafting I	3	9*	6
PHY	205	Physics: Electricity	3	2	4
		Social Science Elective	3	0	3
			14	11	18
FIFTH QUARTER					
DFT	206	Design Drafting II	3	9*	6
ENG	200	Oral Communications	3	0	3
		Social Science Elective	3	0	3
DFT	204	Descriptive Geometry	2	4	4
MEC	201	Materials of Industry	5	0	5
			16	13	21
SIXTH QUARTER					
DFT	212	Jig and Fixture Design	3	6*	5
DFT	211	Mechanisms	2	4	4
PHY	206	Applied Mechanics	5	0	5
MEC	202	Machine Processes II	3	3*	4
			13	13	18

SEVENTH QUARTER

DFT	213	Die Design	3	12*	7
MEC	235	Hydraulics and Pneumatics	3	2	4
MEC	205	Strength of Materials	3	2	4
			9	16	15

Total Credit Hours Required 129

* Manipulative laboratory involves development of skills and job proficiency. Credit of one quarter hour for each three hours of laboratory.

Orchard Management and Horticulture, T-122

The rapid development of orchards and small fruit and vegetable production in Henderson, Transylvania, and adjacent counties has created a definite need for a specialist in these fields. The Orchard Management and Horticulture program at Blue Ridge Technical Institute is designed to train such a specialist. This specialist will be able to assume responsibility for both the business and agricultural aspects of operation of orchards or fruit and vegetable production enterprises. The latest methods of plant propagation, fertilizer uses, insect and disease control, tree pruning, spraying and use of spraying machinery, handling, grading, and storing products, pricing analysis, and plant environment management will be covered. In addition, general education and business courses designed to enable the individual to function as a business supervisor will be included.

Job opportunities for graduates of this program exist in various orchards in the service area of Blue Ridge Technical Institute, as well as in nursery businesses, vegetable and small fruit farms, and in research operations, the opportunities for development of private businesses in this and related agricultural fields are also very good. In addition, the booming interest in preservation of our natural environment has created related jobs such as tree experts, or outdoor recreation planners. This curriculum offers a good basis for employment in these related fields.

Curriculum by Quarters

Course No.	Course Title	Hours Per Week		Quarter Hours Credit
		Class	Lab	
FIRST QUARTER				
AGR 156	Agriculture Machinery and Repair	3	3*	4
MAT 110	Business Mathematics	5	0	5
CHM 107	Agricultural Chemistry	3	2	4
AGR 170	Plant Science	5	2	6
		16	7	19
SECOND QUARTER				
ENG 101	Communication Skills I	3	0	3
BUS 120	Accounting I	3	2	4
AGR 185	Soil Science and Fertilizers	5	2	6
HOR 152	Plant Propagation	3	2	4
ECO 102	Economics I	3	0	3
		17	6	20
THIRD QUARTER				
ENG 102	Communication Skills II	3	0	3
BUS 121	Accounting II	3	2	4
HOR 150	Principles of Horticulture	5	2	6
AGR 186	Insect and Disease Control	5	2	6
		16	6	19
FOURTH QUARTER				
ENG 206	Business Communications	3	0	3
HOR 251	Plant Materials	5	4	7
	Social Science Elective	3	0	3
AGR 298	Special Problems in Orchard Management	5	2	6
		16	6	19
FIFTH QUARTER				
AGR 207	Fruit Storage, Handling, and Grading	3	2	4
AGR 209	Agricultural Prices or Elective**	3	0	3
AGR 205	Agricultural Marketing	3	2	4
	Social Science Elective	3	0	3
AGR 206	Agricultural Finance	3	0	3
		15	4	17
SIXTH QUARTER				
HOR 266	Tree Pruning and Repair	3	2	4
AGR 296	Agricultural Programs and Agencies	3	2	4
AGR 204	Orchard and Farm Business Management	5	0	5
BUS 272	Principles of Supervision	3	0	3
	Elective**	3	2	4
		17	6	20
SEVENTH QUARTER				
AGR 208	Spraying Applications and Machinery	3	2	4
HOR 250	Small Fruits and Vegetables	5	2	6
AGR 299	Plant Environmental Management	5	2	6
	Elective**	3	2	4
		16	8	20

Total Credit Hours in Required Courses 120
Minimum Credit Hours in Electives 14
Total Credit Hours Required 134

* Manipulative laboratory involves development of skills and job proficiency. Credit of one quarter hour for each three hours of laboratory.

** At least 50% of hours in electives must be selected from major area of study.

Business Division

Business Administration Technology, T-018

In North Carolina the opportunities in business are increasing. With the increasing population and industrial development in this state, business has become more competitive and automated. Better opportunities in business will be filled by students with specialized education beyond the high school level. The Business Administration Technology curriculum is designed to prepare the student for employment in one of many occupations common to business. Training is aimed at preparing the student in many phases of administrative work that might be encountered in the average business.

The specific objectives of the Business Administration curriculum are to develop the following competencies:

1. Understanding of the principles of organization and management in business operations.

2. Understanding our economy through study and analysis of the role of production and marketing.

3. Knowledge in specific elements of accounting, finance, and business law.

4. Understanding and skill in effective communication for business.

5. Knowledge of human relations as they apply to successful business operations in a rapidly expanding economy.

The graduate of the Business Administration curriculum may enter a variety of career opportunities from beginning sales person or office clerk to manager trainee. The duties and responsibilities of this graduate vary in different firms. These encompassments might include: making up and filing reports, tabulating and posting data in various books, sending out bills, checking calculations, adjusting complaints, operating various office machines, and assisting managers in supervising. Positions are available in businesses such as advertising; banking; credit; finance; retailing; wholesaling; hotel, tourist, and travel industry; insurance; transportation; and communications.

Curriculum by Quarters

Course No.	Course Title	Hours Per Week		Quarter Hours Credit
FIRST QUARTER		Class	Lab	
ENG 101	Communication Skills I	3	0	3
BUS 102	Typewriting I or Elective **	2	3*	3
MAT 110	Business Mathematics	5	0	5
BUS 101	Introduction to Business	5	0	5
		15	3	16
SECOND QUARTER				
ENG 102	Communication Skills II	3	0	3
BUS 120	Accounting I	3	2	4
BUS 115	Business Law I	3	0	3
ECO 102	Economics I	3	0	3
BUS 110	Office Machines I	2	3*	3
		14	5	16

THIRD QUARTER				
ENG 103	Report Wrting	3	0	3
BUS 121	Accounting II	3	2	4
BUS 116	Business Law II	3	0	3
ECO 104	Economics II	3	0	3
	Elective**	3	0	3
		15	2	16
FOURTH QUARTER				
ENG 206	Business Communications	3	0	3
BUS 222	Accounting III	3	2	4
	Social Science Elective	3	0	3
BUS 243	Advertising	5	0	5
BUS 201	Business Finance I	3	0	3
		17	2	18
FIFTH QUARTER				
EDP 201	Introduction to Data Processing Systems	3	2	4
	Elective**	3	0	3
ENG 200	Oral Communications	3	0	3
	Social Science Elective	3	0	3
BUS 235	Business Management	3	0	3
		15	2	16
SIXTH QUARTER				
BUS 272	Principles of Supervision	3	0	3
BUS 232	Sales Development	3	0	3
BUS 202	Business Finance II	3	0	3
BUS 229	Taxes	3	2	4
	Elective**	3	0	3
		15	2	16
SEVENTH QUARTER				
BUS 239	Marketing	5	0	5
BUS 271	Office Management	3	0	3
BUS 286	Business Seminar	3	0	3
	Electives**	4	0	4
		15	0	15

Total Credit Hours in Required Courses	94
Minimum Credit Hours in Electives	19
Total Credit Hours Required	113

*Manipulative laboratory involves development of skills and job proficiency.

Credit of one quarter hour for each three hours of laboratory.

**At least 50% of hours in electives must be selected from major area of study.

Business Administration Technology, T-018 Evening Division Curriculum by Quarters

Course No.	Course Title	Hours Per Week		Quarter Hours Credit
		Class	Lab	
FIRST QUARTER				
ENG 101	Communication Skills I	3	0	3
MAT 110	Business Mathematics	5	0	5
BUS 101	Introduction to Business	5	0	5
	Elective**	3	0	3
		16	0	16

SECOND QUARTER

ENG	102	Communication Skills II	3	0	3
BUS	120	Accounting I	3	2	4
BUS	115	Business Law I	3	0	3
ECO	102	Economics I	3	0	3
			12	2	13

THIRD QUARTER

ENG	103	Report Writing	3	0	3
BUS	121	Accounting II	3	2	4
BUS	116	Business Law II	3	0	3
ECO	104	Economics II	3	0	3
			12	2	13

FOURTH QUARTER

ENG	206	Business Communications	3	0	3
BUS	222	Accounting III	3	2	4
		Social Science Elective	3	0	3
BUS	243	Advertising	5	0	5
			14	2	15

FIFTH QUARTER

BUS	110	Office Machines I	2	3*	3
ENG	200	Oral Communications	3	0	3
BUS	235	Business Management	3	0	3
BUS	201	Business Finance I	3	0	3
			11	3	12

SIXTH QUARTER

EDP	201	Introduction to Data Processing Systems	3	2	4
BUS	272	Principles of Supervision	3	0	3
BUS	229	Taxes	3	2	4
BUS	202	Business Finance II	3	0	3
			12	4	14

SEVENTH QUARTER

BUS	102	Typewriting I or Elective **	2	3*	3
BUS	271	Office Management	3	0	3
BUS	239	Marketing	5	0	5
		Social Science Elective	3	0	3
			13	3	14

EIGHTH QUARTER

BUS	286	Business Seminar	3	0	3
BUS	232	Sales Development	3	0	3
		Electives**	10	0	10
			16	0	16

Total Credit Hours in Required Courses	94
Minimum Credit Hours in Electives	19
Total Credit Hours Required	113

*Manipulative laboratory involves development of skills and job proficiency. Credit of one quarter hour for each three hours of laboratory.

**At least 50% of hours in electives must be selected from major area of study.

Executive Secretarial Technology, T-030

The well-trained executive secretary is an important company member wherever found in business, industry, government, or the professions. The value of the executive secretary to these organizations is widely known. Working conditions are generally pleasant and comfortable with the secretary engaging in interesting projects and work. With experience, the secretary may advance to office supervisory positions.

With the increased expansion of the business world, job opportunities for individuals with this training will continue to grow.

The graduate of the Executive Secretarial Technology program may be employed as a stenographer or as a secretary. Stenographers are primarily responsible for taking dictation and transcribing letters, memoranda, or reports. The secretary, in addition to taking dictation and transcribing, is given more responsibility in connection with meeting office callers, screening telephone calls, and in being an assistant to an executive.

In order to prepare the graduate for assuming these responsibilities, the curriculum offered by Blue Ridge Technical Institute provides training in the secretarial skills of typing, dictation, transcription, and office terminology. In addition, a variety of related courses are included in the curriculum to provide a broader perspective for the students. These related courses include mathematics, accounting, business law, economics, and professional secretarial development.

Curriculum by Quarters

Course No.		Course Title	Hours Per Week		Quarter Hours
			Class	Lab	Credit
FIRST QUARTER					
ENG	101	Communication Skills I	3	0	3
BUS	102	Typewriting I or Typewriting II	2	3*	3
MAT	110	Business Mathematics	5	0	5
BUS	101	Introduction to Business	5	0	5
BUS	107	Shorthand I or Elective **	3	2	4
			18	5	20
SECOND QUARTER					
ENG	102	Communication Skills II	3	0	3
BUS	120	Accounting I	3	2	4
BUS	108	Shorthand II	3	2	4
BUS	103	Typewriting II or Typewriting III	2	3*	3
BUS	110	Office Machines I	2	3*	3
			13	10	17
THIRD QUARTER					
ENG	103	Report Writing	3	0	3
BUS	121	Accounting II	3	2	4
BUS	109	Shorthand III	3	2	4
BUS	111	Typewriting III or Advanced Typewriting	2	3*	3
BUS	112	Filing	3	0	3
			14	7	17
FOURTH QUARTER					
ENG	206	Business Communications	3	0	3
BUS	211	Office Machines II	2	3*	3
		Social Science Elective	3	0	3
BUS	203	Shorthand IV	3	2	4
BUS	209	Advanced Typewriting or Elective**	2	3*	3
			13	8	16

FIFTH QUARTER					
EDP	201	Introduction to Data Processing Systems	3	2	4
BUS	207	Dictation and Transcription I	3	2	4
ENG	200	Oral Communications	3	0	3
BUS	213	Payroll Procedures	3	0	3
		Social Science Elective	3	0	3
			15	4	17
SIXTH QUARTER					
BUS	208	Dictation and Transcription II	3	2	4
PSY	207	Professional Secretarial Development	3	0	3
BUS	115	Business Law I	3	0	3
BUS	214	Secretarial Procedures	3	2	4
BUS	210	Typewriting Office Practice	3	2	4
			15	6	18
SEVENTH QUARTER					
BUS	216	Dictation and Transcription III	3	2	4
BUS	271	Office Management	3	0	3
BUS	285	Secretarial Internship	0	15*	5
			6	17	12

Total Credit Hours in Required Courses	107
Minimum Credit Hours in Electives	6
Total Credit Hours Required	113

*Manipultive laboratory involves development of skills and job proficiency. Credit of one quarter hour for each three hours of laboratory.

**At least 50% of hours in electives must be selected from major area of study.

General Office Technology, T-033

More individuals are employed in clerical occupations than in any other job category. With the increase of automation and production, there will develop an increased need for individuals who possess technical skills and adaptability for diversified jobs in the clerical field. The General Office Technology program is designed to prepare individuals to fulfill these employment needs.

This program provides specialized training in the skill areas, and adds basic knowledge and additional skills to prepare the student for employment in a modern business office. Graduates of this program may be employed as administrative assistants, accounting clerks, assistant office managers, bookkeepers, file clerks, machine transcriptionists, or in a variety of other clerical-related jobs. Opportunities for employment are available in all types of business and governmental agencies.

Curriculum by Quarters

Course No.		Course Title	Hours Per Week		Quarter Hours Credit
FIRST QUARTER			Class	Lab	
ENG	101	Communication Skills I	3	0	3
BUS	102	Typewriting I or Typewriting II	2	3*	3
MAT	110	Business Mathematics	5	0	5
BUS	101	Introduction to Business	5	0	5
ECO	108	Consumer Economics	3	0	3
			18	3	19

SECOND QUARTER

ENG	102	Communication Skills II	3	0	3
BUS	120	Accounting I	3	2	4
BUS	115	Business Law I	3	0	3
BUS	103	Typewriting II or Typewriting III	2	3*	3
BUS	110	Office Machines I	2	3*	3
			13	8	16

THIRD QUARTER

ENG	103	Report Writing	3	0	3
BUS	121	Accounting II	3	2	4
		Elective**	3	0	3
BUS	111	Typewriting III or Advanced Typewriting	2	3*	3
BUS	112	Filing	3	0	3
			14	5	16

FOURTH QUARTER

ENG	206	Business Communications	3	0	3
BUS	211	Office Machines II	2	3*	3
		Social Science Elective	3	0	3
		Elective**	3	0	3
BUS	209	Advanced Typewriting or Elective	2	3*	3
			13	6	15

FIFTH QUARTER

EDP	201	Introduction to Data Processing	3	2	4
		Systems	2	3*	3
BUS	212	Machine Transcription	3	0	3
ENG	200	Oral Communications	3	0	3
BUS	213	Payroll Procedures	3	0	3
		Social Science Elective	14	5	16

SIXTH QUARTER

BUS	232	Sales Development	3	0	3
PSY	207	Professional Secretarial Development	3	0	3
BUS	229	Taxes	3	2	4
BUS	214	Secretarial Procedures	3	2	4
BUS	210	Typewriting Office Practice	3	2	4
			15	6	18

SEVENTH QUARTER

		Electives**	4	0	4
BUS	271	Office Management	3	0	3
BUS	285	Secretarial Internship	0	15*	5
			7	15	12

Total Credit Hours in Required Courses	96
Minimum Credit Hours in Electives	16
Total Credit Hours Required	112

*Manipulative laboratory involves development of skills and job proficiency. Credit of one quarter hour for each three hours of laboratory.

**At least 50% of hours in electives must be selected from major area of study.

General Office Technology, T-033
Evening Division Curriculum by Quarters

Course No.		Course Title	Hours Per Week Class	Hours Per Week Lab	Quarter Hours Credit
FIRST QUARTER					
BUS	101	Introduction to Business	5	0	5
ECO	108	Consumer Economics	3	0	3
ENG	101	Communication Skills I	3	0	3
MAT	110	Business Mathematics	5	0	5
			16	0	16
SECOND QUARTER					
BUS	102	Typewriting I or Typewriting II	2	3*	3
BUS	115	Business Law I	3	0	3
BUS	120	Accounting I	3	2	4
ENG	102	Communication Skills II	3	0	3
			11	5	13
THIRD QUARTER					
BUS	103	Typewriting II or Typewriting III	2	3*	3
BUS	112	Filing	3	0	3
BUS	121	Accounting II	3	2	4
ENG	103	Report Writing	3	0	3
			11	5	13
FOURTH QUARTER					
BUS	110	Office Machines I	2	3*	3
BUS	111	Typewriting III or Advanced Typewriting	2	3*	3
ENG	206	Business Communications	3	0	3
		Social Science Elective	3	0	3
			10	6	12
FIFTH QUARTER					
BUS	209	Advanced Typewriting or Elective	2	3*	3
BUS	211	Office Machines II	2	3*	3
BUS	213	Payroll Procedures	3	0	3
ENG	200	Oral Communications	3	0	3
			10	6	12
SIXTH QUARTER					
BUS	229	Taxes	3	2	4
EDP	201	Introduction to Data Processing Systems	3	2	4
PSY	207	Professional Secretarial Development	3	0	3
		Elective	3	0	3
			12	4	14
SEVENTH QUARTER					
BUS	212	Machine Transcription	2	3*	3
BUS	214	Secretarial Procedures	3	2	4
BUS	271	Office Management	3	0	3
		Elective	3	0	3
			11	5	13

EIGHTH QUARTER

BUS	232	Sales Development	3	0	3
BUS	210	Typewriting Office Practice	3	2	4
		Social Science Elective	3	0	3
		Electives	4	0	4
			13	2	14
BUS	285	Secretarial Internship ***	0	15*	5

Total Credit Hours in Required Courses	96
Minimum Credit Hours in Electives	16
Total Credit Hours Required	112

*Manipulative laboratory involves development of skills and job proficiency. Credit of one quarter hour for each three hours of laboratory.

**At least 50% of hours in electives must be selected from major areaof study.

***Must be completed before degree is awarded, arrangements are made with participating employer during 7th or 8th quarter.

General Education Curriculum

General Education, G-020

The General Education Curriculum is designed for students who wish to take two years of college close to home before transferring to a senior college or university. It is also designed to serve those individuals who simply wish to improve or expand their knowledge of our culture in its many facets. Basic courses for the first two years of college are offered in this curriculum through a contractual arrangement with Appalachian State University in Boone, North Carolina. To insure transfer credit, students must meet admission requirements established by Appalachian State University. However, a student may enroll in this program and upon completion of ninety-six (96) quarter hours credit be awarded an Associate in General Education Degree from Blue Ridge Technical Institute. Students desiring to transfer into a Bachelor of Arts Degree program upon completion of their work at Blue Ridge Technical Institute should elect ten (10) quarter hours of a second year of foreign language in addition to the required list of courses. The second year of a foreign language is not a requirement for those students who wish to pursue the Bachelor of Science or degrees other than the Bachelor of arts. Students not enrolled in the Appalachian State University transfer program who are working toward Blue Ridge Tech's Associate in General Education may elect ten (10) quarter hours from the technical curricula in place of the second year of a foreign language.

The General Education curriculum will provide the student courses in communications and language, humanities, mathematics, social science, and natural science. These courses are designed to give the student competence in communications and logical thinking, a broad acquaintance with the various components of human knowledge, an understanding of our cultural and social heritage, and an opportunity to develop value judgements, constructive attitudes, and the ability to function purposefully in a democratic society. For the Associate in General Education Degree, the following courses must be completed.

Curriculum by Quarters

Course No.	Course Title	Hours Per Week		Quarter Hours Credit
		Class	Lab	
FIRST QUARTER				
ENG 100	Composition and Rhetoric	5	0	5
MAT 101	Introduction to Mathematics	6	0	6
FRE 101	Elementary French	5	2	5
		16	2	16
SECOND QUARTER				
HIS 110	World Civilization	5	0	5
MAT 107	Algebra and Trigonometry	6	0	6
FRE 102	Elementary French	5	2	5
		16	2	16
THIRD QUARTER				
ENG 110	Introduction to Literature	5	0	5
MAT 111	Calculus I with Analytic Geometry	6	0	6
HIS 111	World Civilization	5	0	5
		16	0	16
FOURTH QUARTER				
PHS 100	Physical Science	3	3	5
ENG 201	English Literature	5	0	5
GEO 101	Introduction to Spatial Science	5	0	5
		13	3	15
FIFTH QUARTER				
SOC 220	Introduction to Sociology	5	0	5
FRE 104	Intermediate French	5	2	5
MUS 201	Introduction to Music	5	0	5
		15	2	15
SIXTH QUARTER				
PHS 101	Physical Science	3	3	5
ENG 202	English Literature	5	0	5
FRE 105	Intermediate French	5	2	5
		13	5	15

Total Credit Hours	93
Electives	3
Total Credit Hours Required For Associate Degree	96

Second Year Students, 1975-76

Course No.	Course Title	Hours Per Week		Quarter Hours Credit
		Class	Lab	
FALL QUARTER				
ENG 201	English Literature	5	0	5
POL 110	American National Government and Politics	5	0	5
GEO 101	Introduction to Spatial Science	5	0	5
		15	0	15

WINTER QUARTER				
FRE 104	Intermediate French	5	2	5
ECO 201	Principles of Economics	5	0	5
MUS 201	Introduction to Music	5	0	5
		15	2	15
SPRING QUARTER				
FRE 105	Intermediate French	5	2	5
ECO 202	Principles of Economics	5	0	5
ENG 202	English Literature	5	0	5
		15	2	15

Credit Hours Earned 1974-75	53 Quarter Hours
Credit Hours This Outline	45 Quarter Hours
Needed for Associate in General Education	98 Quarter Hours

Vocational Division

Automotive Body Repair, V-001

The Automotive Body Repair Curriculum provides training in the use of the equipment and materials of the auto body mechanic trade. The student studies the construction of the automobile body and techniques of auto body repairing, rebuilding, and refinishing. Much of the student's time in this program is spent on learning basic skills and practicing these skills on car bodies and components. An attempt is made to present practical experiences which are as similar as possible to the actual on-the-job work.

Repairing, straightening, aligning, metal finishing, and painting of automobile bodies and frames are typical jobs performed. Experience is also gained in examining damaged vehicles and estimating the cost of repair, in removing and repairing upholstery, accessories, and electrical and hydraulic window-and-seat operating equipment, and in repairing headlights, wheels, and brake systems.

Job titles include automobile body repairman, automotive painter, automobile-collision serviceman, body-line finisher, and touch-up finisher. After gaining additional experience, many students may go on to open their own businesses, or to become shop foremen, supervisors, or managers.

Automotive Body Repair, V-001

Evening Division Curriculum by Quarters

Course No.	Course Title	Hours Per Week		Quarter Hours
		Class	Lab	Credit
FIRST QUARTER				
PSY 1101	Human Relations	3	0	3
AUT 1201	Auto Body Repair I, Part I	2	6*	4
MAT 1101	Fundamentals of Mathematics	4	0	4
		9	6	11
SECOND QUARTER				
AUT 1202	Auto Body Repair I, Part 2	2	6*	4
WLD 1101	Basic Welding I	1	3*	2
ENG 1101	Basic Communications I	3	0	3
		6	9	9

THIRD QUARTER					
PHY	1101	Applied Science I	2	2	3
AUT	1203	Auto Body Repair II, Part 1	2	6*	4
DFT	1101	Automotive Schematics and Diagrams	1	3*	2
			5	11	9
FOURTH QUARTER					
AUT	1204	Auto Body Repair II, Part 2	2	6*	4
PHY	1102	Applied Science II	2	2	3
ENG	1102	Basic Communications II	3	0	3
			7	8	10
FIFTH QUARTER					
WLD	1106	Auto Body Welding	1	3*	2
AUT	1205	Metal Finishing and Painting, Part 1	2	6*	4
BUS	1103	Small Business Operations	3	0	3
			6	9	9
SIXTH QUARTER					
AUT	1206	Metal Finishing and Painting, Part 2	2	6*	4
AUT	1114	Trim, Glass, and Upholstery	2	6*	4
			4	12	8
SEVENTH QUARTER					
AUT	1207	Body Shop Applications, Part 1	3	9*	6
			3	9	6
EIGHTH QUARTER					
AUT	1208	Body Shop Applications, Part 2	3	9*	6
			3	9	6
		Total Credit Hours in Required Courses			68

*Manipulative laboratory involves development of skills and job proficiency. Credit of one quarter hour for each three hours of laboratory.

Carpentry and Cabinetmaking, V-007

The Carpentry and Cabinetmaking Curriculum is designed to provide instruction in construction methods, characteristics of wood and composition products, blueprint reading, and mathematics. Problems encountered in the carpentry and cabinetmaking trades are covered in classroom and laboratory settings. Emphasis is on the practical application of the factual information which is presented.

Specific jobs which the carpentry and cabinetmaking curriculum prepares for are varied. The graduate of this curriculum may be employed in the construction, erection, installation and repairing of structures and fixtures of wood, plywood, and wallboard, using carpenter's handtools and power tools. Proper adherence to local and state building codes will be emphasized. The graduate will be able to study blueprints, sketches, or building plans for information pertaining to types of materials required, and will be able to select the proper type of lumber or other material for the job. the graduate will also be able to prepare layouts, using rules, framing square, and calipers. Other jobs performed by the graduate of this curriculum might include shaping materials to prescribed measurements using saws, chisels, and planes; assembling cut and shaped materials; verifying trueness of structure with plumb bob and carpenter's level; erecting framework for structures and laying subflooring; building stairs and laying out, building, and installing, cabinet work; covering surfaces with moisture-barrier on sound-proofing materials; fitting and installing window frames, doors, door-frames, weather stripping, interior and exterior trim, and finish hardware; and constructing concrete forms and pouring chutes. The graduate will also be called on to construct small masonry structures.

While job opportunities in the carpentry and cabinetmaking trade vary as the construction trades vary, there are always opportunities in this field for those who possess the skills and have been properly trained in their trade. The graduate will normally enter the trade as an advanced apprentice.

Carpentry and Cabinetmaking, V-007

Evening Division Curriculum by Quarters

Course No.	Course Title	Hours Per Week		Quarter Hours Credit
		Class	Lab	
FIRST QUARTER				
MAT 1101	Fundamentals of Mathematics	4	0	4
PSY 1101	Human Relations	3	0	3
CAR 1201	Carpentry I, Part 1	2	6*	4
		9	6	11
SECOND QUARTER				
ENG 1101	Basic Communications I	3	0	3
DFT 1110	Building Trades Blueprint Reading I	1	3*	2
CAR 1202	Carpentry I, Part 2	2	6*	4
		6	9	9
THIRD QUARTER				
PHY 1101	Applied Science I	2	2	3
DFT 1111	Building Trades Blueprint Reading II	1	3*	2
CAR 1203	Carpentry II, Part 1	2	6*	4
		5	11	9
FOURTH QUARTER				
PHY 1102	Applied Science II	2	2	3
ENG 1102	Basic Communications II	3	0	3
CAR 1204	Carpentry II, Part 2	2	6*	4
		7	8	10
FIFTH QUARTER				
BUS 1103	Small Business Operations	3	0	3
MAT 1103	Building Trades Mathematics	4	0	4
CAR 1205	Carpentry III, Part 1	2	6*	4
		9	6	11
SIXTH QUARTER				
CAR 1206	Carpentry III, Part 2	2	6*	4
CAR 1104	Construction Estimating	2	6*	4
		4	12	8
SEVENTH QUARTER				
CAR 1207	Finishing and General Carpentry, Part 1	2	6*	4
CAR 1107	Basic Masonry	1	3*	2
		3	9	6
EIGHTH QUARTER				
CAR 1208	Finishing and General Carpentry, Part 2	2	6*	4
CAR 1106	Building Codes	2	2	3
		4	8	7

Total Credit Hours in Required Courses 71

*Manipulative laboratory involves development of skills and job proficiency. Credit of one quarter hour for each three hours of laboratory.

Automotive Mechanics, V-003

The complexity of modern automotive vehicles increases each year due to new scientific discovery and engineering. These changes are reflected not only in passenger vehicles but also in trucks, buses, and a variety of gasoline-powered equipment. It is therefore very important that our communities prepare trained individuals to maintain and repair these vehicles.

The modern automotive mechanic must be prepared to maintain and repair mechanical, electrical, and body parts of passenger cars, trucks, and buses. In some communities, the mechanic will be required to service tractors or marine engines and other gasoline-powered equipment. The trained mechanic must utilize a vast knowledge of automotive theory and mechanical skill along with modern testing machines, electronic equipment, and shop manuals and technical publications in order to inspect, diagnose, and repair troubles which develop in vehicles or motors. In some areas, the mechanic may specialize in one type of repair such as power steering, front-end, brakes, automatic transmission or tune-up of engines. These specialists must also have an all-around knowledge of automotive repair as they are often called on to perform other types of repair work.

The automotive mechanics curriculum prepares the student to fill these roles by giving necessary theoretical courses and practical training on mockups and actual vehicles so that, upon graduation the student may enter a shop and earn a living as an automotive mechanic. Through additional continuing education this student should be able to advance rapidly in the field.

Curriculum by Quarters

Course No.	Course Title	Hours Per Week		Quarter Hours Credit
		Class	Lab	
FIRST QUARTER				
PME 1101	Internal Combustion Engine.	4	12*	8
WLD 1101	Basic Welding I	1	3*	2
MAT 1101	Fundamentals of Mathematics	4	0	4
PHY 1101	Applied Science I	2	2	3
		11	17	17
SECOND QUARTER				
PME 1102	Engine Electrical and Fuel Systems	4	12*	8
DFT 1101	Automotive Schematics and Diagrams	1	3*	2
AHR 1101	Automotive Air Conditioning	1	3*	2
PHY 1102	Applied Science II	2	2	3
		8	20	15
THIRD QUARTER				
AUT 1123	Automotive Chassis, Suspension, and Braking	4	12*	8
AUT 1125	Automotive Servicing I	2	6*	4
ENG 1101	Basic Communications I	3	0	3
PSY 1101	Human Relations	3	0	3
		12	18	18
FOURTH QUARTER				
AUT 1124	Automotive Power Train Systems	4	12*	8
AUT 1126	Automotive Servicing II	2	6*	4
ENG 1102	Basic Communications II	3	0	3
BUS 1103	Small Business Operations	3	0	3
		12	18	18
	Total Hours in Required Courses			68

*Manipulative laboratory involves development of skills and job proficiency. Credit of one quarter hour for each three hours of laboratory.

Electrical Installation and Maintenance, V-018

A rapidly expanding national economy, the increase in population, and the increasing development of new electrical products are providing a growing need for qualified tradesmen to install and maintain electrical equipment. More than 350,000 persons were employed either as construction or maintenance electricians by the mid-1960's, and between 5,000 and 10,000 additional tradesmen are required each year to replace those leaving the industry. Therefore, the employment outlook for individuals with training in this trade looks very good for a long period in the future.

The graduate of an electrical trades program will be prepared to enter employment as an on-the-job trainee or apprentice. The apprentice's initial job will involve working as an assistant in the planning, layout, installation, check out, and maintenance of electrical systems in residential property or in commercial and industrial plants and shops. To do this, the trainee must acquire an understanding of the fundamentals of the National Electrical Code regulations as they relate to wiring installations, electrical circuits, and the measurements of voltage, current, power, and power factors of single and polyphase alternating circuits. The trainee must also acquire a basic knowledge of motors and motor control systems, industrial electronic control systems, business procedures in the electrical trades, communication skills necessary on the job, mathematics, and blueprint reading skills.

The curriculum offered at Blue Ridge Technical Institute provides the student with experience and training in each of these necessary areas of the electrical trade. Much of the time is spent in laboratory sessions where practical application of electrical theory are taught. With this training and a program of continuing education after graduation (also offered by the institute), the graduate should be prepared to advance rapidly in the electrical field.

Curriculum by Quarters

Course No.	Course Title	Hours Per Week		Quarter Hours Credit
		Class	Lab	
FIRST QUARTER				
ELC 1112	Electricity I	4	12*	8
ELC 1104	Electrical Blueprint Reading I	1	3*	2
MAT 1115	Electrical Math I	4	0	4
PHY 1101	Applied Science I	2	2	3
		11	17	17
SECOND QUARTER				
ELC 1113	Electricity II	5	15*	10
ELC 1105	Electrical Blueprint Reading II	1	3*	2
MAT 1116	Electrical Math II	4	0	4
		10	18	16
THIRD QUARTER				
ELN 1118	Industrial Electronics I	2	6*	4
ELC 1124	Residential Wiring	4	12*	8
ENG 1101	Basic Communications I	3	0	3
PSY 1101	Human Relations	3	0	3
		12	18	18

FOURTH QUARTER					
ELN	1119	Industrial Electronics II	2	6*	4
ELC	1125	Commercial and Industrial Wiring	4	12*	8
ENG	1102	Basic Communications II	3	0	3
BUS	1103	Small Business Operations	3	0	3
			12	18	18
		Total Hours in Required Courses			69

*Manipulative laboratory involves development of skills and job proficiency. Credit of one quarter hour for each three hours of laboratory.

Electrical Installation and Maintenance, V-018
Evening Division Curriculum by Quarters

Course No.		Course Title	Hours Per Week Class	Hours Per Week Lab	Quarter Hours Credit
FIRST QUARTER					
ELC	1201	Electricity I, Part 1	2	6*	4
PSY	1101	Human Relations	3	0	3
MAT	1115	Electrical Math I	4	0	4
			9	6	11
SECOND QUARTER					
ELC	1202	Electricity I, Part 2	2	6*	4
ENG	1101	Basic Communications I	3	0	3
MAT	1116	Electrical Math II	4	0	4
			9	6	11
THIRD QUARTER					
ELC	1203	Electricity II, Part 1	3	9*	6
PHY	1101	Applied Science I	2	2	3
			5	11	9
FOURTH QUARTER					
ELC	1204	Electricity II, Part 2	2	6*	4
ELC	1104	Electrical Blueprint Reading I	1	3*	2
ENG	1102	Basic Communications II	3	0	3
			6	9	9
FIFTH QUARTER					
ELC	1205	Residential Wiring, Part 1	2	6*	4
ELC	1105	Electrical Blueprint Reading II	1	3*	2
BUS	1103	Small Business Operations	3	0	3
			6	9	9
SIXTH QUARTER					
ELC	1206	Residential Wiring, Part 2	2	6*	4
ELN	1118	Industrial Electronics I	2	6*	4
			4	12	8
SEVENTH QUARTER					
ELC	1207	Commercial and Industrial Wiring Part 1	2	6*	4
ELN	1119	Industrial Electronics II	2	6*	4
			4	12	8

EIGHTH QUARTER				
ELC 1208	Commercial and Industrial Wiring, Part 2	2	6*	4
	Free Electives	2	6*	4
		4	12	8

Total Hours in Required Courses 73

*Manipulative laboratory involves development of skills and job proficiency. Credit of one quarter hour for each three hours of laboratory.

Industrial Mechanics, V-033

The curriculum in Industrial Mechanics is designed to prepare students with a broad background in industrial skills required of the person who goes into industry as a mechanic. The graduate of this program will be prepared to enter employment as an on-the-job trainee or apprentice in an industrial plant. As a skilled maintenance mechanic, the employee will perform maintenance inspections, preventive maintenance, repair and overhaul existing equipment and machinery, install new machines, and salvage old equipment. The maintenance mechanic will be responsible for keeping production equipment and other components of the plant in good working order.

To perform these duties, the trainee should be a competent machinist and welder; should know the fundamentals of hydraulics and pneumatics; should be familiar with the maintenance of instruments and controls used with industrial equipment, and should be able to get along and communicate with persons in every phase of production and manufacturing. Training on the job can help the individual advance to more responsible positions in the manufacturing plant.

Industrial Mechanics, V-033

Evening Division Curriculum By Quarters

Course No.	Course Title	Hours Per Week		Quarter Hours Credit
		Class	Lab	
FIRST QUARTER				
MEC 1201	Machine Shop I	2	6*	4
PSY 1101	Human Relations	3	0	3
MAT 1101	Fundamentals of Mathematics	4	0	4
		9	6	11
SECOND QUARTER				
MEC 1202	Machine Shop II	2	6*	4
ENG 1101	Basic Communications I	3	0	3
MAT 1112	Mathematics for Machinists I	4	0	4
		9	6	11
THIRD QUARTER				
MEC 1203	Machine Shop III	2	6*	4
PHY 1101	Applied Science I	2	2	3
DFT 1104	Blueprint Reading: Mechanical	1	3*	2
		5	11	9
FOURTH QUARTER				
MEC 1204	Machine Shop IV	2	6*	4
ENG 1102	Basic Communications II	3	0	3
DFT 1127	Blueprint Reading for Machinists	1	3*	2
		6	9	9

FIFTH QUARTER					
WLD	1001	Welding I	2	6*	4
MEC	1127	Basic Hydraulics and Pneumatics	2	6*	4
			4	12	8
SIXTH QUARTER					
WLD	1102	Welding II	2	6*	4
MEC	1107	Pump Repair and Maintenance	2	6*	4
			4	12	8
SEVENTH QUARTER					
WLD	1105	Welding III	2	6*	4
MEC	1205	Drive Components	2	6*	4
			4	12	8
EIGHTH QUARTER					
MEC	1206	Industrial Safety	4	0	4
MEC	1207	Preventive and Systems Maintenance	1	3*	2
MEC	1208	Hydraulic and Pneumatic Troubleshooting	2	6*	4
			7	9	10
			Total Hours in Required Courses		74

*Manipulative laboratory involves development of skills and job proficiency. Credit of one quarter hour for each three hours of laboratory.

Machinist, V-032

Surveys recently completed in North Carolina and locally show that many of the existing industries lack the time and facilities for training enough machinists to meet present and planned needs. Expanding industries already located in our state and new industries under development invariably express the need for skilled machinists who have the background, knowledge, and potential to advance.

This course is designed to give students the opportunity to acquire basic knowledge, skills, and related technical information necessary to gain employment in the machine shop industry. Students will develop skill in bench work, layout, drilling, lathe work, milling, shaping, planing, broaching, and grinding. Operating principles of machine tools, use of measuring and testing instruments, math and blueprint reading are also covered. Through actual shop experience, class assignments, discussion, demonstrations, and experiments, the students become industrially qualified.

The qualified graduate is a skilled metal worker who shapes metal parts by using machine tools and hand tools. The graduate's training and experience prepare for planning and carrying through all the operations needed in turning out a machined product or for switching readily from one kind of product to another. The graduate will be able to select the proper tools and material required for each job and to plan the cutting and finishing operations in their proper order so that the finished work can be completed according to blueprint or written specifications. This individual also makes standard shop computations relating to dimensions of work, tooling, feeds, and speeds of machining. Through the use of instruments such as micrometers and gages, tolerances within a thousandth of an inch can be reached by the machinist.

Blue Ridge Technical Institute offers this program to provide the student with the training and skills needed in this trade. With this training the graduate should be prepared for employment and rapid advancement.

Curriculum by Quarters

Course No.	Course Title	Hours Per Week		Quarter Hours Credit
		Class	Lab	
FIRST QUARTER				
MEC 1101	Machine Shop Theory and Practice I	3	9*	6
WLD 1101	Basic Welding I	1	3*	2
DFT 1104	Blueprint Reading: Mechanical	1	3*	2
MAT 1101	Fundamentals of Mathematics	4	0	4
PHY 1101	Applied Science I	2	2	3
		11	17	17
SECOND QUARTER				
MEC 1102	Machine Shop Theory and Practice II	4	12*	8
DFT 1127	Blueprint Reding for Machinists	1	3*	2
MAT 1112	Mathematics for Machinists I	4	0	4
PHY 1102	Applied Science II	2	2	3
		11	17	17
THIRD QUARTER				
MEC 1103	Machine Shop Theory and Practice III	4	12*	8
MEC 1115	Metallurgy I	1	3*	2
MAT 1113	Mathematics for Machinists II	4	0	4
ENG 1101	Basic Communications I	3	0	3
PSY 1101	Human Relations	3	0	3
		15	15	20
FOURTH QUARTER				
MEC 1104	Machine Shop Theory and Practice IV	4	12*	8
MEC 1116	Metallurgy II	1	3*	2
MAT 1114	Mathematics for Machinists III	4	0	4
ENG 1102	Basic Communications II	3	0	3
BUS 1103	Small Business Operations	3	0	3
		15	15	20

Total Hours in Required Courses 74

*Manipulative laboratory involves development of skills and job proficiency. Credit of one quarter hour for each three hours of laboratory.

Practical Nursing Education, V-038

The accelerated growth of population in North Carolina and rapid advancement in medical technology demand an increased number of well-trained personnel for health services. Realizing this need, the North Carolina Department of Community Colleges, in conjunction with local hospitals, administers programs of practical nurse education throughout the state.

The aim of the Practical Nurse Education Program at Blue Ridge Technical Institute is to prepare qualified persons for participation in care of patients of all ages, in various states of dependency, and with a variety of illness conditions. Graduates of this program will be eligible to take the licensing examination given by the North Carolina Board of Nursing. This examination is given twice each year, usually in April and September. A passing score entitles the individual to receive a license and to use a legal title "Licensed Practical Nurse." The Licensed Practical Nurse can apply for licensure in other states on the basis of a satisfactory examination score, without repeating the examination.

The LPN is prepared to function in a variety of situations: hospitals of all types, nursing homes, clinics, doctors' and dentists' offices, and public health facilities. In all situations the LPN functions under supervision of a registered nurse and/or licensed physician. This supervision may be minimal in situations where the patient's condition is stable and not complex; or it may consist of continuous direction in situations requiring the knowledge and skills of the registered nurse or physician. In the latter situation, the LPN may function in an assisting role in order to avoid assuming responsibility beyond that for which the one-year program can prepare the individual.

Job requirements for the Licensed Practical Nurse include suitable personal characteristics, ability to adapt knowledge and understanding of nursing principles to a variety of situations, technical skills for performance of patient-side nursing, appreciation for differences of people and for the worth of every individual, a desire to serve and help others, and readiness to conform to the requirements of nursing ethics and hospital or agency policies. An LPN is a well-trained person who assists in the care of patients and fills a much needed place in the health field.

Curriculum by Quarters

Course No.	Course Title	Hours Per Week			Quarter Hours Credit
		Class	Lab	Clinical Lab	
FIRST QUARTER					
NUR 1101	Fundamentals of Basic Nursing	9	6*	3*	12
NUR 1102	Body Structure and Function	5	2	0	6
NUR 1103	Vocational Adjustments	2	0	0	2
PSY 1101	Human Relations	3	0	0	3
		19	8	3	23
SECOND QUARTER					
NUR 1104	Medical-Surgical Nursing I	4	2	0	5
NUR 1105	Maternity Nursing I	2	0	0	2
NUR 1106	Pediatric Nursing I	2	0	0	2
NUR 1107	Pharmacology	2	0	0	2
NUR 1108	Clinical Experience I	0	0	18*	6
		10	2	18	17
THIRD QUARTER					
NUR 1109	Medical-Surgical Nursing II	6	0	0	6
NUR 1110	Maternity Nursing II	3	0	0	3
NUR 1111	Pediatric Nursing II	3	0	0	3
NUR 1112	Clinical Experience II	0	0	18*	6
		12	0	18	18
FOURTH QUARTER					
NUR 1113	Medical-Surgical Nursing III	7	2	0	8
ENG 1101	Basic Communications I	3	0	0	3
NUR 1114	Clinical Experience III	0	0	18*	6
		10	2	18	17

Total Hours in Required Courses 75

*Manipulative laboratory involves development of skills and job proficiency.
Credit of one quarter hour for each three hours of laboratory.

Welding, V-050

Recently completed manpower surveys indicate that many welders will be needed annually to fill present and projected vacancies in this state. Thirty-seven of the 103 firms contacted in a recent workforce survey of Henderson County indicated the need for trained welders. In addition to the wide possibilities for employment in welding, this field offers a person prestige, security, and a future of continuous employment with steady advancement. It offers employment in practically any industry; ship-building, automotive, aerospace, railroads, construction, pipe fitting, ship production, job shop, and many others.

Welders join metals by applying intense heat, and sometimes pressure, to melt the edges to form a permanent bond. This is done by learning to control heat from either an electric arc or gas welding torch and by adding filler metal where necessary to complete the joint. Closely related to welding is "oxyacetylene cutting" of metal. The teaching of these skills constitutes the major portion of the curriculum in welding at Blue Ridge Technical Institute. In addition, the student is given introductory courses in layout planning, blueprint reading, mathematics, basic metallurgy, human relations, and communication skills. The curriculum will provide the necessary skills for employment as a welder.

Curriculum by Quarters

Course No.		Course Title	Hours Per Week		Quarter Hours
			Class	Lab	Credit
FIRST QUARTER					
WLD	1120	Oxyacetylene Welding and Cutting	4	12*	8
DFT	1104	Blueprint Reading: Mechanical	1	3*	2
MAT	1101	Fundamentals of Mathematics	4	0	4
PHY	1101	Applied Science I	2	2	3
			11	17	17
SECOND QUARTER					
WLD	1121	Arc Welding	4	12*	8
DFT	1117	Blueprint Reading: Welding	1	3*	2
MAT	1117	Mathematics for Welders	4	0	4
PHY	1102	Applied Science II	2	2	3
			11	17	17
THIRD QUARTER					
WLD	1124	Pipe Welding and Pipe Fitting	4	12*	8
WLD	1123	Inert Gas Welding	1	3*	2
WLD	1112	Mechanical Testing and Inspection	1	3*	2
ENG	1101	Basic Communications I	3	0	3
PSY	1101	Human Relations	3	0	3
			12	18	18
FOURTH QUARTER					
WLD	1122	Commercial and Industrial Practices	3	9*	6
WLD	1125	Certification Practices	1	3*	2
MEC	1112	Machine Shop Processes for Welders	2	6*	4
ENG	1102	Basic Communications II	3	0	3
BUS	1103	Small Business Operations	3	0	3
			12	18	18

Total Hours in Required Courses 70

*Manipulative laboratory involves development of skills and job proficiency. Credit of one quarter hour for each three hours of laboratory.

Welding, V-050
Evening Division Curriculum by Quarters

Course No.		Course Title	Hours Per Week		Quarter Hours Credit
			Class	Lab	
FIRST QUARTER					
MAT	1101	Fundamentals of Mathematics	4	0	4
PSY	1101	Human Relations	3	0	3
WLD	1201	Oxyacetylene Welding and Cutting, Part 1	2	6*	4
			9	6	11
SECOND QUARTER					
ENG	1101	Basic Communications I	3	0	3
DFT	1104	Blueprint Reading: Mechanical	1	3*	2
WLD	1202	Oxyacetylene Welding and Cutting, Part 2	2	6*	4
			6	9	9
THIRD QUARTER					
DFT	1117	Blueprint Reading: Welding	1	3*	2
PHY	1101	Applied Science I	2	2	3
WLD	1203	Arc Welding, Part 1	2	6*	4
			5	11	9
FOURTH QUARTER					
ENG	1102	Basic Communications II	3	0	3
PHY	1102	Applied Science II	2	2	3
WLD	1204	Arc Welding, Part 2	2	6*	4
			7	8	10
FIFTH QUARTER					
BUS	1103	Small Business Operations	3	0	3
MAT	1117	Mathematics for Welders	4	0	4
WLD	1205	Pipe Welding and Pipe Fitting, Part 1	2	6*	4
			9	6	1
SIXTH QUARTER					
WLD	1112	Mechanical Testing & Inspection	1	3*	2
WLD	1123	Inert Gas Welding	1	3*	2
WLD	1206	Pipe Welding and Pipe Fitting, Part 2	2	6*	4
			4	12	8
SEVENTH QUARTER					
WLD	1122	Commercial and Industrial Practices	3	9*	6
			3	9	6
EIGHTH QUARTER					
MEC	1112	Machine Shop Processes for Welders	2	6*	4
WLD	1125	Certification Practices	1	3*	2
			3	9	6

Total Hours in Required Courses 70

*Manipulative laboratory involves development of skills and job proficiency. Credit of one quarter hour for each three hours of laboratory.

Continuing Education

Continuing education infers a life-long learning process. It is the purpose of Blue Ridge Technical Institute to afford this opportunity to each individual to develop to his fullest potential in whatever vocational, intellectual or cultural areas he desires. It is also the aim of the institute to be of service to area industries, businesses, and public agencies by providing training and upgrading for employees. To meet these aims the Continuing Education Division of the institute will offer a variety of courses and programs.

Continuing Education is one of the major educational divisions of the institute. Programs include: Occupational Extension, New and Expanding Industry Training, Adult Basic & High School Education, Community Services, Learning Centers, and Human Resources Development.

The development of continuing education for adults is based upon the interest shown by the community, availability of competent instructors, and the limitations of available equipment, space, and funds. Whenever possible, courses are arranged as community needs or interests are indicated. Some classes constantly in demand are offered on a continuing basis. Others are started at the requests of individuals or organizations. The institute welcomes such requests and suggestions for additional courses.

Continuing education classes conducted by Blue Ridge Technical Institute are both vocational and avocational in nature. These classes are non-curriculum, vary in length, are conducted both day and evening, and are taught by qualified instructors selected by the Institute. A schedule of classes being offered is published by the institute prior to each quarter and during the quarter as new classes are arranged.

For more information about continuing education, contact the Director of Adult Education or the Director of Extension.

Admission

In accordance with Blue Ridge Technical Institute's "open door" policy, any adult who can profit from what is being offered by the institution is eligible to enroll.

Registration

Interested persons should notify the Institute by phone, letter or personal visit to place their names on the pre-registration list for each class. Registration will be held at the first class meeting.

Meeting

To comply with North Carolina law, a $3.00 fee will be charged to each person enrolling in all classes with the exception of courses for local law enforcement officers, rescue personnel, volunteer firemen, and prison inmates. This fee is payable at the first class meeting, but must be paid before the second class meeting. Individuals are responsible for purchasing supplies and materials as necessary. Books and supplies are available through the Institute Bookstore.

Class Locations

A number of continuing education classes are held at Blue Ridge Technical Institute. Others are conducted throughout Henderson and Transylvania Counties at local public schools, community centers, churches, industries, businesses or wherever a suitable meeting place can be arranged. Classes are organized in any community whenever a sufficient number of prospective class members indicate an interest.

Attendance

A minimum enrollment of 10 persons is needed to conduct a class. Adults are expected to attend class regularly. Attendance records are maintained by instructors. Insufficient enrollment or attendance will result in cancellation of the class.

Certificates

Certificates are awarded in certain classes to students successfully completing course requirements. Also, a Certificate of High School Equivalency is awarded to adults who successfully complete the high school equivalency tests.

Instructors

Qualified instructors, as determined by the Directors of Extension and Adult Education will be employed for continuing education classes. Leaders from the community in civic, cultural, educational, industrial and business fields as well as persons skilled or knowledgeable in particular areas of interest are available as instructors.

Occupational Extension Education Programs

Extension classes are designed to meet the needs of industry, business and other areas of occupational endeavor. Specifically, where there is a need for:

1. Upgrading for those within a specific occupation.
2. Retraining classes for those wishing to change their vocation.
3. Preparation of individuals for initial employment.

All classes are organized where a demand for certain skills are required, based upon the needs of the firm or group as represented. The classes may be arranged singly, as a cluster of courses, or on a long-range schedule. In some cases, advisory committees made up of knowledgeable personnel from industry and business assist in the determination of needs and organization of courses. Flexibility is the key asset in the Occupational Extension Program.

Classes will be conducted in any location which is suitable and which meets the requirements of all groups concerned.

The following is a partial list of the many areas of training available:

Fire Service Training

Hospitality and Tourism Education

Woodworking Occupations

Law Enforcement

Building Trades Courses

Agricultural Business and Production

Equipment Maintenance (various areas)

Management Development Program

One of the special emphasis programs in the extension division is Management Development Program. MDP consists of twenty-one well prepared courses which, in many instances, can be taught almost verbatim. Each course of training serves one or more of the following purposes: to help develop potential supervisors to assume full supervisory responsibilities; to prepare present supervisors for advancement to greater responsibilities; to improve abilities of supervisors at all levels; and most importantly, to make supervisors and potential supervisors more proficient in their present assignments. A supervisor may pursue as many of the courses as he desires and thereby afford himself an opportunity for extensive training. Emphasis has been placed on group dynamics and creative problem-solving techniques. Classes are scheduled to meet the needs of local industry and business, and qualified instructors are provided without charge. Please contact the Director of Extension Programs for further information concerning specific courses.

New and Expanding Industry Training

One of the basic objectives of Blue Ridge Technical Institute is to stimulate the creation of more challenging and rewarding jobs for the people of our area by providing a customized training service to new and expanding industries. Subject to only minimal limitations, this institution, in cooperation with the Industrial Services Division of the State Department of Community Colleges, will design and administer a special program for training the production manpower required by any new or expanding industry creating new job opportunities in North Carolina.

This program includes the following services:

1. Consultation in determining job descriptions; defining areas of training; and in prescribing appropriate course outlines, training schedules, and materials.

2. Selecting and training of instructors. These instructors may be recruited from the company and from outside sources.

3. Payment of instructors' wages for the duration of the training program.

4. Provision of suitable space for a temporary training facility prior to the completion of the new plant, should such temporary space be required. This may be space within Blue Ridge Technical Institute or leased space in the community.

5. Assumption of installation costs of equipmment in the temporary training facility.

6. Payment for one-half of the cost of nonsalvageable materials expended in the training program.

The purpose of this service is to help a new or expanding industry meet its immediate manpower needs and to encourage each industry to develop a long-range training program of its own to satisfy its continuing replacement and retraining needs.

For further details of this service, please contact the President, Blue Ridge Technical Institute or the Director, Industrial Services Division, North Carolina Department of Community Colleges, Raleigh, North Carolina.

Adult Basic Education

Adults who have less than a high school education may enroll in Adult Basic Education. Originally authorized under the Economic Opportunity Act of 1964, and later by the Adult Education Act of

1966, the program is now administered by the U.S. Office of Education. In North Carolina, the Department of Community Colleges has been designated as the agency in charge of the program. As a member of this department, Blue Ridge Technical Institute has been assigned Henderson and Transylvania Counties as an Adult Basic Education service area. To serve this area, classes are usually held two evenings per week in Brevard and Hendersonville and at neighborhood locations.

The ABE program includes instruction in reading, writing, social studies, math, science, consumer education, and health education. In all these areas, instruction is related as closely as possible to helping students meet their adult responsibilities. Students enrolled in ABE classes benefit from individual study, teacher explanations, group discussions, progress evaluations, and modern educational materials including books, worktexts, and audio-visual materials and equipment. No registration fees are charged and all books and materials are provided by the institute.

ABE classes lay the groundwork for many individuals to sufficiently raise their achievement level to pass the General Educational Development Tests and obtain an adult high school diploma.

Students may enter ABE classes at any time. However, all individuals are encouraged to enroll during the registration period at the beginning of each quarter. It is advisable also, for students to maintain attendance in ABE classes over a period of several school quarters. This continuity facilitates learning and enables students to take advantage of the complete program being offered.

Adult High School

Adults who would like to complete their high school education may enroll in the Adult High School Program. Classes in mathematics, English, science, and social studies are available. In all these classes, instruction is designed to help students review high school subjects or obtain a certificate of high school equivalency. After sufficient preparation, individuals may take a series of tests called the General Educational Development Tests (GED). Those receiving an acceptable passing score will be awarded a High School Equivalency Certificate. This certificate is generally accepted on a basis equal to a high school diploma for employment, promotion, or for further education. Preparation for the tests can be made through both the Adult Basic and High School Program and the Learning Centers of the Institute.

High School Equivalency Tests

Blue Ridge Technical Institute has been designated as an official testing center for the General Educational Development Tests. To adults who did not previously complete high school, the North Carolina Department of Public Instruction will issue a "High School Diploma Equivalency Certificate" when they meet the following requirements:

1. Make a standard score of 35 or above on each of the five tests and an average score of 45 or all five tests.

2. Be eighteen years of age or older and not enrolled in public high school for six months.

3. Make an application for the tests on official application blanks available at Blue Ridge Technical Institute.

The GED tests are given in the Learning Centers in Brevard and in Hendersonville. Preparation for the tests can be made in the Learning Centers or the Adult Basic and High School classes.

Interested persons should contact the Learning Centers to obtain information about the time and dates the GED tests will be scheduled.

Community Services

Community Service classes and programs are offered by Blue Ridge Technical Institute to afford

the opportunity for individuals to gain satisfaction through self-advancement. This includes opportunities to grow intellectually, to develop creative skills or talents, to learn hobby or leisure tim activities, and to gain civic and cultural awareness. The programs enable the community to take advantage of educational opportunities by utilizing the educational, financial, human, physical or other resources available through Blue Ridge Technical Institute.

Because of the organizational flexibility of the Community Service programs a wide variety of classes, lectures, seminars, workshops and conferences are conducted both on campus and in other locations within the institute service area of Henderson and Transylvania Counties.

Community Service Classes fall into the following broad catagories:

Fundamental Education
Humanities
Religion
Languages
Math
Philosophy, Politics & Social Science
Science
Applied Chemistry
Civil Engineering Methods
Physics
Agriculture
Distribution & Marketing
Health & Safety
Home Economics
Office
Trades & Industry

For many specialized classes within the categories listed above, please contact the Director of Adul Education or Director of Extension.

Learning Centers

The learning centers offer individuals a new way to learn through the use of programmed and self-instructional materials and the use of audio-visual learning aids. These materials are available in a wide variety of subects and in a wide range of levels.

Individuals may enroll simply by coming to one of the learning centers and talking with the coordinator. There are brief forms to be filled out. There is no charge made for use of the materials in the leaning centers.

In the Learning Centers a person may:

1. Study for and take the General Educational Development Tests to receive a High School Diploma Equivalency Certificate.

2. Prepare for further education in a technical institute or college.

3. Study a subject in academic or general interest areas.

4. Improve in job skill area.

Programmed or self-instructional materials are available in the following areas:

Language arts — reading, vocabulary, spelling, grammar, letter writing, college English.

Mathematics — arithmetic, consumer math, Algebra I and II, plane geometry, solid geometry, trigonometry, calculus, the slide rule.

Foreign language — German, Spanish, French.

Business — economics, accounting, business math, filing skills, shorthand I and II, bookkeeping.

Science — biology, chemistry, physics, general science, geology, meteorology, astronomy, electricity, electronics.

Social Studies —American history, world history, black history, government, geography, map reading.

Others — medical terminology, chess, interior decoration, handwriting improvement, listening skills, study methods, etc.

These are only a few of the many areas of study available. If materials covering an area of special interest are not already available in the learning centers, it may be possible to obtain these for the individual student.

Learning center facilities are presently located in both Henderson and Transylvania counties. In Henderson County the Campus learning center is located at the Blue Ridge Tech campus in the Patton Building. The hours are from 8:00 am to 10:00 pm, Monday through Thursday, and from 8:00 am to 5:00 pm on Friday. In Transylvania County the Transylvania Adult Learning Center is located on the old Brevard Elementary School campus in Brevard. The center is open from 8:00 am to 9:00 pm, Monday through Thursday, and from 8:00 am to 4:00 pm on Friday. A second center is located at Olin Corporation in the Training Center. The Olin center is open from 11:00 am until 5:00 pm, Monday through Friday. A coordinator is available at each center during the hours of operation to assist in the use of the various programs to offer instructional assistance. Individuals may set their schedules at convenient times during these hours.

The Campus learning center and the Transylvania Adult learning center also offer a High School Equivalency Program for adults. This program is approximately 6 months long and provides instruction in reading, English, math, social studies, and science. It is designed to prepare an adult to take and pass the General Educational Development Test and receive a High School Diploma Equivalency Certificate. This program was Approved December 1, 1971, by the Veterans Administration for persons eligible under Title 38, U.S. Code. These benefits are in addition to those already due the veteran and do not count against future eligibility for educational assistance. There are no charges for this program.

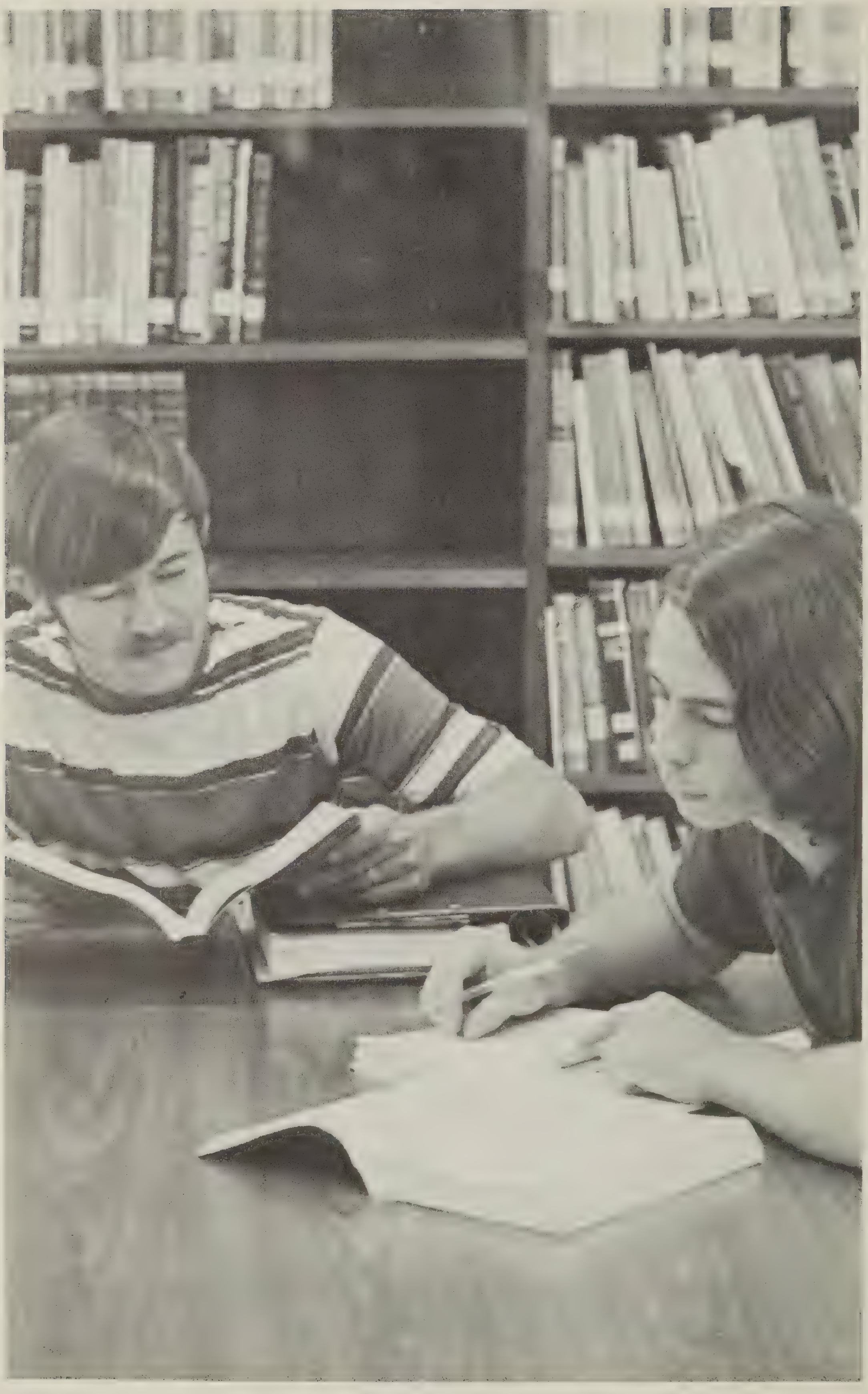
Human Resources Development Program

Operating under a state grant, Blue Ridge Technical Institute provides a special program for training unemployed and underemployed persons in the necessary basic skills for finding and holding full-time work. The program is offered in eight-week cycles which operate continuously, regardless of the regular BRTI schedule.

Students enrolled in the Human Resources Development Program take two courses which meet for five days per week during each eight-week cycle. Adult Basic Education, meeting three hours each day, upgrades each student's basic communications and computation skills. Many students are able to complete the General Educational Development Test for high school equivalency certification as a part of this course.

The students also take part in a three-hour-per-day course in human resource development, which provides them with skills in human relations which are needed for finding and holding full-time work. As a part of the program, students tour several factories and meet and talk with many potential employers. The final weeks of the program are devoted to actual job seeking.

Person interested in this program should contact the Human Resources Development recruiter at 692-9988.



Course Descriptions

The following course descriptions are listed with a three-letter prefix, which identifies the department, and a three or four digit number, which identifies either degree or diploma level courses. Those courses with three digit numbers may be used for credit in the associate degree programs. Courses with four digit identification numbers may be used for credit in diploma programs.

The course title is listed in bold type. This is followed by three numbers which indicate the number of lecture hours in a course, the number of laboratory hours, and the number of credit hours, in that order.

Those courses which start with the prefix ISC or NUR have four numbers representing the following: the number of lecture hours in the course, the number of laboratory hours, the number of independent or clinical laboratory hours, and the number of credit hours, in that order.

The following abbreviations are used at the end of the description to indicate the quarter or quarters in which a course will be offered: F — fall quarter, W — winter quarter, S — spring quarter, and SS — summer quarter.

AGR 156 **Agriculture Machinery and Repair** 3 3* 4

A study of the operating principles of basic farm machinery. Includes principles of design and mechanics, power supply, hitching, and economics of use. Laboratory sessions in repair and basic gas welding will be included.
Prerequisite: None F

AGR 170 **Plant Science** 5 2 6

An introductory general botany and crop science course covering the fundamental principles of the reproduction, growth, functions, and development of seed bearing plants with application to certain commercially important plants in North Carolina.
Prerequisite: None F

AGR 185 **Soil Science and Fertilizers** 5 2 6

A course dealing with basic principles of efficient classification, evaluation, and management of soils; cultivation and fertilization of the soil; and conservation of soil fertility.
Prerequisite: CHM 107 or equivalent background in chemistry W

AGR 186 **Insect and Disease Control** 5 2 6

A study of insects, their beneficial qualities and use, their harmful qualities and types, and the use of pesticides for control. Course also covers plant diseases and methods of disease control.
Prerequisite: CHM 107 or equivalent background in chemistry S

AGR 203 **Plant Pathology** 5 2 6

An advanced course in detection of plant pests and disease, methods of control, and new reseach and its applications.
Prerequisite: AGR 186 S

AGR 204 **Orchard and Farm Business Management** 5 0 5

A review of the functions of the manager of a business firm and the problems he faces. Development of the concept of the planning by both partial and complete budgeting. Review of the concepts of cost and the length of run in production. Practice in preparing enterprise budgets as an aid in choosing what to produce. Use of partial budgeting to fund the least cost production procedure. Analysis of production data to select the level of production that

yields the most net revenue. Relationship between size, efficiency and income of an orchard or farm. Review of procedures for evaluating the efficiency of the manager.
Prerequisite: BUS 121 W

AGR 205 **Agricultural Marketing** 3 2 4
An analysis of the functions of marketing in the economy and a survey of the problems marketing faces. A review of market structure and the relationship of local, terminal, wholesale, retail, and foreign markets. Problems in the operation of marketing firms including buying and selling, processing, standardization and grading, risk taking and storage, financing efficiency, and cooperation. Discussion of procedures of marketing such commodities as grain, cotton, livestock, tobacco, apples, and small fruits and vegetables.
Prerequisite: ECO 102 or equivalent background in economics F

AGR 206 **Agricultural Finance** 3 0 3
Analysis of the capital structure of modern commercial agriculture with emphasis on the sources of credit. A review of lending institutions, repayment schedules, and credit instruments. Practice in the procedure of evaluating farm resources with attention to information needed for resource valuation, appraisal forms and procedures, discounting and depreciation.
Prerequisite: MAT 110 or equivalent background in mathematics F

AGR 207 **Fruit Storage, Handling, and Grading** 3 2 4
A detailed study of the methods of handling, grading, and storing of various fruit products. Special emphasis will be given to storage and handling methods for apples with emphasis on preparation, transportation, and cold-storage.
Prerequisite: CHM 107 or equivalent background in chemistry. F

AGR 208 **Spraying Applications and Machinery** 3 2 4
Emphasis is on orchard spraying utilizing the various techniques of correct application and modern equipment and innovations. Special consideration will be given to nozzle selection for various applications. Economics of various systems, equipments, and methods will be covered as well as legal aspects of application.
Prerequisite: AGR 156 and CHM 107 or equivalent background. S

AGR 209 **Agricultural Prices** 3 0 3
An introduction to the functions of prices in our economic system and the effects of changing price levels. The influence consumer demand has on prices through price and income elasticities are studied. A review of the influences of cycles and timing of production along with an examination of the use of future commodity contracts. Application of the principles of price analysis to price control and parity programs. Familiarization with the various tools widely used in historical analysis and forecasting are also covered.
Prerequisite: ECO 102 or equivalent background in economics. F

AGR 296 **Agricultural Programs and Agencies** 3 2 4
A review of the public agriculture programs and agencies that provide services for agricultural producers. The objectives, organization, functions and services of these organizations.
Prerequisite: None W

AGR 298 **Special Problems in Orchard Management** 5 2 6

Individual study and reports on a problem or topic of interest to the student under guidance of the instructor. Student will be encouraged to work on a problem or topic related to a local orchard.

Prerequisite: Sophomore standing in orchard management. SS

AGR 299 **Plant Environmental Management** 5 2 6

A study of latest research and successful methods of environmental control as applied to the production of fruits and vegetables.

Prerequisite: HOR 150 or equivalent background in horticulture S

AHR 1101 **Automotive Air Conditioning** 1 3* 2

General introduction to the principles of refrigeration, study of the assembly of the components and connections necessary in the mechanisms, the methods of operation and control, and proper handling of refrigerants in charging the system.

Prerequisites: None W

AUT 1114 **Trim, Glass, and Upholstery** 2 6* 4

Familiarization of various methods of attaching and removing trim, glass and hardware. Instruction in proper installation and adjustment of door glasses, aligning and sealing windshields and rear glasses, stressing safety precautions. Instruction in materials and methods used for cleaning interior trim and upholstery.

Prerequisite: AUT 1205 W

AUT 1123 **Automotive Chassis, Suspension, and Braking** 4 12* 8

Principles and functions of the components of the automotive chassis. Practical job instruction in adjusting and repairing of suspension and steering

systems. Complete study of various braking systems employed on automobiles and light weight trucks. Emphasis is placed on how they operate, proper adjustment, and repair.
Prerequisite: PHY 1101 or equivalent S

AUT 1124 **Automotive Power Train Systems** 4 12* 8
Principles and functions of automotive power train systems: clutches, transmission gears, torque converters, drive shaft assemblies, rear axles and differentials. Identification of troubles, servicing, and repair.
Prerequisite: PHY 1102 or permission of instructor SS

AUT 1125 **Automotive Servicing I** 2 6* 4
Emphasis is on the shop procedures necessary in determining the nature of troubles developed in the various component systems of the automobile. Trouble-shooting of automotive systems, providing a full range of experiences in testing, adjusting, repairing, and replacing.
Prerequisites: Two quarters of automotive program or permission of instructor. S

AUT 1126 **Automotive Servicing II** 2 6* 4
Continuation of Automotive Servicing I
Prerequisite: Aut 1125 SS

AUT 1201 **Auto Body Repair I, Part 1** 2 6* 4
Basic princples of automobile construction, design and manufacturing. A thorough study of the requirements of a metal worker including the use of essential tools, formation of sheet metal into angles and crowns and straightening simple damage. The student applies the basic principles of straightening, shrinking, filling, aligning and painting of damaged parts.
Prerequisite: None F

AUT 1202 **Auto Body Repair I, Part 2** 2 6* 4
A continuation of AUT 1201
Prerequisite: AUT 1201 W

AUT 1203 **Auto Body Repair II, Part 1** 2 6* 4
Development of skills to shrink stretched metal filling and preparation of the metal for painting. Straightening of doors, hoods and deck lids; fitting and aligning of panels. Removal and replacement of outer panels, checking and straightening of damaged frames. Writing of estimates, pricing and ordering of parts and developing the final settlement with customer. Practice of spot repairs and complete repainting of vehicle.
Prerequisite: None S

AUT 1204 **Auto Body Repair II, Part 2** 2 6* 4
A continuation of AUT 1203
Prerequisite: AUT 1203 SS

AUT 1205 **Metal Finishing and Painting, Part 1** 2 6* 4
A continuation of all phases of instruction covered in AUT and , making the instruction as realistic as possible by making repairs and refinishing cars with actual collision damage. Special emphasis will be placed on paint products, techniques of use, color matching and paint problems.
Prerequisites: AUT 1203, 1204 F

AUT 1206 **Metal Finishing and Painting, Part 2** 2 6* 4
A continuation of AUT 1205
Prerequisite: AUT 1205, 1203, 1204, WLD 1106 W

AUT 1207 **Body Shop Applications, Part 1** 3 9* 6
General introduction in the automotive chassis and suspension systems, the methods of operation and control and the safety of the vehicle. Unit job application covers straightening of frames and front end alignment. The student applies all phases of training such as writing estimates, parts ordering, repairs and refinishing of projects.
Prerequisites: AUT 1205, 1206, AUT 1114 S

AUT 1208 **Body Shop Applications, Part 2** 3 9* 6
A continuation of AUT 1207
Prerequisites: AUT 1207, 1205, 1206, AUT 1114 SS

BUS 101 **Introduction to Business** 5 0 5
A survey of the business world with particular attention devoted to the structure of the various types of business organization, methods of financing, internal organization, and management.
Prerequisite: None F

BUS 102 **Typewriting I** 2 3* 3
Introduction to the touch typewriting system with emphasis on correct techniques, mastery of the keyboard, simple business correspondence, tabulation, and manuscripts.
Prerequisite: None F,W,S,SS

BUS 103 **Typewriting II** 2 3* 3
Instruction emphasizes the development of speed and accuracy with further mastery of correct typewriting techniques. These skills and techniques are applied in tabulation, manuscript, correspondence, and business forms.
Prerequisite: BUS 102 or equivalent. Speed requirement, 40 GWPM for five minutes. F,W,S,SS

BUS 106 **Personal Finance** 3 0 3
Management of personal finances, budgeting, savings, insurance, stocks and bonds, and real estate.
Prerequisite: None W

BUS 107 **Shorthand I** 3 2 4
A beginning course in the theory and practice of reading and writing shorthand. Emphasis on phonetics, penmanship, word families, brief forms, and phrases.
Prerequisite: None F,W,S,SS

BUS 108 **Shorthand II** 3 2 4
Continued study of theory with greater emphasis on dictation and elementary transcription.
Prerequisite: BUS 107 or equivalent F,W,S,SS

BUS 109 **Shorthand III** 3 2 4
Theory and speed building. Introduction to office style dictation. Emphasis on development of speed in dictation, and accuracy in transcription.
Prerequisite: BUS 108 S

BUS 110 **Office Machines I** 2 3* 3

A general survey of business and office machines. Students will receive training in techniques, processes, operation, and application of ten-key adding machines, printing calculators, and electronic calculators.

Prerequisite: MAT 10 or equivalent SS,F,W

BUS 111 **Typewriting III** 2 3* 3

Emphasis on production typing problems and speed building. Attention to the development of the student's ability to function as an expert typist, producing mailable copies. The production units are tabulation, manuscript, correspondence, and business forms.

Prerequisite: BUS 103 or equivalent. Speed requirement, 50 GWPM for five minutes. W,S,SS

BUS 112 **Filing** 3 0 3

Fundamentals of indexing and filing, combining theory and practice by the use of index cards, miniature letters, filing boxes, and guides. Alphabetic, Geographic, subject, and numeric systems of filing taught.

Prerequisite: None S

BUS 115 **Business Law I** 3 0 3

A general course designed to acquaint the student with certain fundamentals and principles of business law, including contracts, negotiable instruments, sales-buyer and seller relationships.

Prerequisite: None W

BUS 116 **Business Law II** 3 0 3

The study of laws pertaining to security devices and insurance, personal property and bailments, real property, and estates.

Prerequisite: BUS 115 S

BUS 120 **Accounting I** 3 2 4

Principles, techniques, and tools of accounting for understanding of the mechanics of accounting. Collecting, summarizing, analyzing, and reporting information about service and mercantile enterprises. Practical application of the principles learned are included.

Prerequisite: MAT 110 W

BUS 121 **Accounting II** 3 2 4

Principles and practices in dealing with notes receivable, accounts receivable, notes payable, accounts payable, depreciation, insurance, inventory methods, internal controls, payrolls, and federal and state taxes. Recording, summarizing, and interpreting data for management control, and the contribution of accounting services in the recognition and solution of management problems are emphasized.

Prerequisites: BUS 120 S

BUS 201 **Business Finance I** 3 0 3

Financing of business units as individuals, partnerships, corporations, and trusts. A detailed study is made of short-term, long-term, and consumer financing.

Prerequisite: None F,S,SS

BUS 202 **Business Finance II** 3 0 3

Financing federal, state, and local government and the ensuing effects upon the economy. Factors affecting supply of funds and monetary and credit policies are covered.

Prerequisite: BUS 201 W

BUS 203 **Shorthand IV** 3 2 4

Continuation of Shorthand III with emphasis on speed and accuracy.
Prerequisite: BUS 109 SS

BUS 207 **Dictation and Transcription I** 3 2 4

Develops the skill of taking dictation and of transcribing at the typewriter materials appropriate to the course of study, which includes a review of the theory and the dictation of familiar and unfamiliar material at varying rates of speed. Minimum dictation rate of 100 words per minute required for five minutes on new material.
Prerequisite: BUS 109 F

BUS 208 **Dictation and Transcription II** 3 2 4

Covering materials appropriate to the course of study, the student develops the accuracy, speed, and vocabulary that will enable her to meet the stenographic requirements of business and professional offices. Minimum dictation rate of 110 words per minute required for five minutes on new material.
Prerequisite: BUS 207 W

BUS 209 **Advanced Typewriting** 2 3* 3

Emphasis is placed on the development of individual production rates. The student learns the techniques needed in planning and in typing projects that closely approximate the work appropriate to the field of study. These projects include review of letter forms, methods of duplication, statistical tabulation, and the typing of reports, manuscripts, and legal documents.
Prerequisite: BUS 111. Speed requirement, 50 GWPM for five mintes. F,S,SS

BUS 210 **Typewriting Office Practice** 3 2 4

Designed to familiarize student with forms and routines found in a typical business. Emphasis placed upon correct procedures and adaptability to varying office methods.
Prerequisite: BUS 209 W,SS

BUS 211 **Office Machines II** 2 3* 3

Instructions in the operation of duplicating equipment and dictating and transcribing machines.

Prerequisite: BUS 103 F,SS

BUS 212 **Machine Transcription** 2 3* 3

A study and practice course in the use of transcribing machines in business dictation. Proficiency in word usage, correct grammar, and letter styles will be emphasized.

Prerequisites: BUS 103 and ENG 101 F,S,W

BUS 213 **Payroll Procedures** 3 0 3

Designed to familiarize student with basic forms of remuneration, procedures for deductions, methods of computation of earnings, basic information concerning withholding and employer's payroll taxes, and other areas basic to handling payrolls for industrial, professional or business firms.

Prerequisite: Sophomore standing F

BUS 214 **Secretarial Procedures** 3 2 4

Designed to acquaint the student with the responsibilities encountered by a secretary during the work day. These include the following: receptionist duties, handling the mail, telephone techniques, travel information, telegrams, office records, purchasing of supplies, office organization, and insurance claims.

Prerequisite: Completion of first five quarters of Executive secretarial or general office curriculum. W,S

BUS 216 **Dictation and Transcription III** 3 2 4

Principally a speed course, covering materials appropriate to the course of study, with emphasis on speed as well as accuracy. Minimum dictation rate 120 words per minute required for five minutes on new material.

Prerequisite: BUS 208 S

BUS 217 **Business Law III** 3 0 3

The study of laws of agency and employment, partnerships, corporations, bankruptcy, government regulation of business, and labor law.

Prerequisite: BUS 116 S

BUS 219 **Credit Procedures and Problems** 3 0 3

Principles and practices in the extension of credit collection procedures, laws pertaining to credit extension, and collection are included.

Prerequisite: BUS 121 S

BUS 222 **Accounting III** 3 2 4

Partnership and corporation accounting with thorough treatment of general accounting. The balance sheet, income and surplus investments, and analysis of working capital are covered.

Prerequisite: BUS 121 SS

BUS 223 **Accounting IV** 3 2 4

Control accounting with emphasis on departments and branches, manufacturing and process cost systems, job order cost systems and budgetary control. Also included is the interpretation, analysis and utilization of accounting statements.

Prerequisite: BUS 222 S

BUS 226 **Cost Accounting and Estimating** 4 0 4

Nature and purposes of cost accounting: accounting for direct labor, materials, and factory burden; job cost and standard cost principles and procedures; selling and distribution cost; budgets, and executive use of cost figures. Use of standard data developed through efficient cost system in preparing accurate cost estimates.

Prerequisite: MAT 100 F

BUS 229 **Taxes** 3 2 4

Introduction to federal taxes on personal income; income tax withholding; declaration of estimated tax by individuals; and preparation of income tax returns for individuals and partnerships.

Prerequisite: None W

BUS 232 **Sales Development** 3 0 3

A study of retail, wholesale, and specialty selling. Emphasis is placed upon mastering and applying the fundamentals of selling. Preparation for the execution of sales demonstrations required.

Prerequisite: Sophomore standing W,SS

BUS 233 **Personnel Management** 4 0 4

Principles of organization and management of personnel, procurement, placement, training, performance checking, supervision, renumeration, labor relations, fringe benefits and security.

Prerequisite: Sophomore standing W,SS

BUS 235 **Business Management** 3 0 3

Principles of business management including overview of major functions of management such as planning, staffing, controlling, directing, financing. Clarification of the decision-making function versus the operating function. Role of management in business qualifications, and requirements.

Prerequisite: Sophomore standing F

BUS 239 **Marketing** 5 0 5

A general survey of the field of marketing with a detailed study of the functions, policies, and institutions involved in the marketing process.

Prerequisite: Sophomore standing S

BUS 243 **Advertising** 5 0 5

The role of advertising in a free economy and its place in the media of mass communications. A study of advertising appeals, product and market reseach, selection of media, and means of testing effectiveness of advertising. Theory and practice of writing advertising copy for various media.

Prerequisite: Sophomore standing SS

BUS 245 **Retailing** 3 0 3

A study of the role of retailing in the economy including development of the present retail structure, functions performed, principles governing effective operations, and managerial problems resulting from current economic and social trends.

Prerequisite: None S

BUS 247 **Business Insurance** 3 0 3

A presentation of the basic principles of risk insurance and their application. A survey of the various types of insurance is included.

Prerequisite: Sophomore standing W

BUS 271 **Office Management** 3 0 3

Presents the fundamental principles of office management. Emphasis on the role of office management including its functions, office automation, planning, controlling, organizing and actuating office problems.

Prerequisite: Sophomore standing S

BUS 272 **Principles of Supervision** 3 0 3

Introduces the basic responsibilities and duties of the supervisor and his relationship to superiors, subordinates, and associates. Emphasis on securing an effective word force and the role of the supervisor. Methods of supervision are stressed.

Prerequisite: None W

BUS 285 **Secretarial Internship** 0 15* 5

Student will receive "on-the-job" experience in a community business or industry office as an intern. For a minimum of 15 hours per week for 11 weeks, the student will be given the opportunity, under learning conditions, to apply those skills taught in a classroom setting.

Prerequisite: Completion of first six quarters of executive secretarial or general office curriculum. S

BUS 286 **Business Seminar** 3 0 3

Seminar on current topics in business as assigned by instructor.

Prerequisite: Completion of first six quarters of a business curriculum. S,SS

BUS 1103 **Small Business Operations** 3 0 3

An introduction to the business world, problems of small business operation, basic business law, business forms and records, financial problems, ordering and inventorying, layout of equipment and offices, methods of improving business, and employer-employee relations.

Prerequisite: None F,SS

CAR 1104 **Construction Estimating** 2 6* 4

This is a practical course in quantity "take-off" from prints of the more common type jobs for brick masons and carpenters. Students will compute the quantities of materials needed and the cost of building various components and structures.

Prerequisite: DFT 1111 or equivalent experience W

CAR 1106 **Building Codes** 2 2 3

A study is made of building codes and the minimum requirements for local, county, and state regulations to include Federal Housing Administration regulation. Studies are limited to single family dwellings or light commercial construction. The student would be introduced to the Occupational Safety and Health Act provisions.

Prerequisite: None SS

CAR 1107 **Basic Masonry** 1 3* 2

This course is designed to give the student practice in selecting the proper mortars, layout, and construction of various building elements such as foundations, walls, chimneys, arches, and cavity walls. The proper use of bonds, expansion strips, wall ties, and chalking methods are stressed. Laboratory experiences emphasize the practical aspects of the various types and methods of masonry construction as presented in the classroom.

Prerequisite: None S

CAR 1201 **Carpentry I, Part 1** 2 6* 4

The course will involve operation, care, and safe use of carpentry hand tools and power tools in cutting, shaping, and jointing construction materials used by the carpenter. Major topics of study will include theoretical and practical applications involving: materials and methods of construction, building layout, preparation of site, footings and foundation wall construction including form construction and erection. Compliance with the provisions of the Occupational Safety and Health Act will be stressed. Laboratory experiences are designed to reinforce classroom presentations.

Prerequisite: None F

CAR 1202 **Carpentry I, Part 2** 2 6* 4

A continuation of CAR 1201

Prerequisite: CAR 1201 W

CAR 1203 **Carpentry II, Part 1** 2 6* 4

Cabinetmaking and millwork as performed by the general carpenter for building construction will be introduced. Use of shop tools and equipment will be emphasized in learning methods of construction of millwork and cabinetry. Practical application will include measuring, laying out and construction of: base and wall cabinets, built-in desks, door and window frames, stairs, and interior and exterior corners and trim. Materials and finishes will also be studied. Emphasis will also be placed on adherence to established safety practice and procedures and adherence to the Occupational Safety and Health Act provisions.

Pererequisite: CAR 1201, 1202 or equivalent experience. S

CAR 1204 **Carpentry II, Part 2** 2 6* 4

A continuation of CAR 1203

Prerequisites: CAR 1203 or equivalent experience. SS

CAR 1205 **Carpentry III, Part 1** 2 6* 4

Instruction is given in the principles and practices of frame construction beginning with the foundation sills and including: floor joist, subfloor, wall studs, ceiling joist, rafters, bridging, bracing, sheathing, and interior wall partition. Roof construction includes the layout and construction methods of common types of roofs using standard rafter construction, truss construction, and post and beam construction. Application and selection of sheathing and roofing is included. Consideration is given to the coordination of carpentry work with installation of the mechanical equipment such as: electrical, air conditioning, heating, and plumbing.

Prerequisites: CAR 1203, CAR 1204, DFT 1111 F

CAR 1206 **Carpentry III, Part 2** 2 6* 4

A continuation of CAR 1205

Prerequisites: CAR 1205, DFT 1111 W

CAR 1207 **Finishing and General Carpentry, Part 1** 2 6* 4

Exterior and interior trim and finish capentry will complete the general carpentry program. Included will be materials and methods used in finishing carpentry such as: exterior cornice, door and window trim; interior flooring, door and window facing, moldings, and cornice construction; installation of hardware; and installation of built-in equipment and cabinets.

Prerequisites: CAR 1205, CAR 1206 S

CAR 1208 **Finishing and General Carpentry, Part 2** 2 6* 4

A continuation of CAR 1207

Prerequisites: CAR 1207 SS

CHM 107 **Agricultural Chemistry** 3 2 4

Inorganic and organic chemistry principles and their applications to fertilizers, pesticides, soil science, and other aspects of agriculture and horticulture.

Prerequisite: None F

DFT 101 **Drafting I** 3 9* 6

An introduction to the basic theory of engineering drawing, its content, and the instruments and skills necessary to make acceptable drawings. Basic geometric constructions, lettering, theory and practice of orthographic projection, and standards and practices of dimensioning are covered. Principles of isometric, oblique, and perspective drawing are introduced.

Prerequisite: None F

DFT 102 **Drafting II** 3 9* 6

The application of orthographic projection principles to the more complex drafting problems, primary and secondary auxiliary views, simple and successive revolutions, and sections and conventions will be studied. Graphical analysis of space problems introduced. Problems of practical design elements involving points, lines, planes, and a combination of these elements shall be studied. Dimensioning practices for "details" and "working drawings" approved by the American Standards Association will also be included. Introduction is given to intersections and developments of various types of geometrical objects.

Prerequisite: DFT 101 W

DFT 103 **Drafting III** 3 9* 6

Intersection and developments and their practical solutions. Where applicable, model solutions accompany the problems. The various techniques employed to produce and render isometric and oblique drawings, and isometric, dimetric, and trimetric projections will be studied.

Prerequisite: DFT 102. S

DFT 121 **Technical Drafting I** 2 2 3

An introduction to the basic theory of engineering drawing, its content, and the instruments and skills necessary to make acceptable drawings. Basic geometric constructions, lettering, theory and practice of orthographic projection, and standards and practices of dimensioning are covered. Principles of isometric, oblique, and perspective drawing are introduced.

Prerequisite: None W

DFT 122 **Technical Drafting II** 2 2 3

Further development of skills objectives listed in DFT 121.

Prerequisite: DFT 121 S

DFT 201 **Technical Drafting III** 2 2 3

The application of orthographic projection principles to the more complex drafting problems. Primary and secondary auxiliary views, simple and successive revolutions, and sections and conventions will be studied. Graphical analysis of space problems introduced. Problems of practical design elements

involving points, lines, planes, and a combinations of these elements shall be studied. Dimensioning practices for "details" and "working drawings" approved by the American Standards Association will also be included. Introduction is given to intersections and developments of various types of geometrical objects.
Prerequisite: DFT 122 SS

DFT 202 **Technical Drafting IV** 2 2 3
Further development of skills listed on DFT 201
Prerequisite: DFT 201 F

DFT 204 **Descriptive Geometry** 2 4 4
Graphic analysis of space problems involving points, lines, planes, connectors, and a combination of these. Practical design problems will be stressed with analytical vertification where applicable. Visualizaion shall be stressed on every problem.
Prerequisites: DFT 205 and MAT 203 F

DFT 205 **Design Drafting I** 3 9* 6
Basic design is introduced in the study of motion transfer mechanisms as they relate to power trains. Principles of design sketching, design drawing, layout drafting, detailing from layouts, production drawings, and simplified drafting practices constitute areas of study. Types and methods of specifying materials and workmanship are an integral part of the course.
Prerequisite: DFT 103, MAT 103, and PHY 102 SS

DFT 206 **Design Drafting II** 3 9* 6
Research to solve a problem in design by consulting various manuals, periodicals, and through laboratory experiments. A written technical report, preliminary design sketches, layout drawings, detail drawings, assembly and subassembly drawings, pictorial drawings, exploded pictorial assembly, patent drawings, and specifications are required as a part of the problem.
Prerequisite: DFT 205 F

DFT 211 **Mechanisms** 2 4 4
Mathematical and drafting room solutions of problems involving the principles of machine elements. Study of motions of linkages, velocities, and acceleration of points within a link mechanism; layout methods for designing cams, belts, pulleys, gears and gear trains.
Prerequisites: DFT 206, MAT 203, and PHY 205 W

DFT 212 **Jig and Fixture Design** 3 6* 5
Commercial standards, principles, practices and tools of jig and fixture design. Individual project and design work to acquaint students with the types of jigs and fixtures and their design.
Prerequisite: DFT 206 W

DFT 213 **Die Design** 3 12* 7
This course is designed to introduce the student to the various types of dies that are most widely used in industry today. Topics to be covered are: the design, use, and construction of blanking dies, forming dies, compound dies, combination dies, draw dies, trim dies, cam dies, and progressive dies. In addition, press information and selection, die materials and equipment, safety features, production factors, costs and other related information, which is important to the designer, will be included in the course.
Prerequisite: DFT 212 S

DFT 1101 **Automotive Schematics and Diagrams** 1 3* 2

Interpretation and reading of blueprints. Development of ability to read and interpret blueprints, charts, instruction and service manuals and wiring diagrams. Information on the basic principles of lines, views, dimensioning procedures and notes.

Prerequisite: None W,S

DFT 1104 **Blueprint Reading: Mechanical** 1 3* 2

Interpretation and reading of blueprints. Information on the basic principles of the blueprint; lines, views, dimensioning procedures, and notes.

Prerequisite: None F,S,W,

DFT 1110 **Building Trades Blueprint Reading I** 1 3* 2

Principles of interpreting blueprints and specifications common to the building trades. Development of proficiency in making three view and pictorial sketches. Specific topics include: the working drawing, placement of views, dimensioning, invisible edges, circles and arcs and sectional views, and reading of selected prints.

Prerequisite: None W

DFT 1111 **Building Trades Blueprint Reading II** 1 3* 2

An advanced course covering blueprint reading, sketching, and estimating in residential carpentry. Topics covered include: specifications, dimensioning, scale elevations, wall sections, plan views, plot plan, basement plan, floor plan symbols and indications, schedules, cornices, walls, windows, dormers and louvers, stairs, fireplace and cabinets.

Prerequisite: DFT 1110 or equivalent experience in blueprint reading S

DFT 1117 **Blueprint Reading: Welding** 1 3* 2

A thorough study of trade drawings in which welding procedures are indicated. Interpretation, use, and application of welding symbols, abbreviations, and specifications.

Prerequisite: DFT 1104 or permission of instructor W,S

DFT 1127 **Blueprint Reading for Machinists** 1 3* 2

Further practice in interpretation of blueprints as they are used in industry; study of prints supplied by industry; making plans of operations; introduction to drafting room procedures; sketching as a means of passing on ideas, information, and processes.

Prerequisite: DFT 1104 W,SS

ECO 102 **Economics I** 3 0 3

The fundamental principles of economics including the institutions and practices by which people gain a livelihood. Included is a study of the laws of supply and demand and the principles bearing upon production, exchange, distribution, and consumption both in relation to the individual enterprise and to society at large.

Prerequisite: None W

ECO 104 **Economics II** 3 0 3

Greater depth in principles of economics, including a penetration into the composition and pricing of national output, distribution of income, international trade and finance, and current economic problems.

Prerequisite: ECO 102 S

ECO 108 **Consumer Economics** 3 0 3

Designed to help the student use his resources of time, energy, and money to get the most out of life. It gives the student an opportunity to build useful skills in buying, managing his finances, increasing his resources, and to understand better the economy in which he lives.

Prerequisite: None F

ECO 201 **Principles of Economics** 5 0 5

A study of the present day economics system; demand and supply, prices and costs; wages, rent, interest and profit; business cycles; money, banking, and the Federal Reserve System; international trade; and a comparison of Capitalism, Socialism, Communism, and Facism. (Same as Appalachian State University's ECO 2010)

W

ECO 202 **Principles of Economics** 5 0 5

A Continuation of ECO 201. (Same as Appalachian State University's ECO 2020)

Prerequisite: ECO 201 S

ECO 203 **Economics of Transportation** 3 0 3

Introduction to economics of transportation. Topics covered include: regional physical distribution, programs of production and restrictions, business inventories, cargo containers, foreign trade zones, freight classifications, and planning distribution centers.

Prerequisite: Sophomore standing F

EDP 201 **Introduction to Data Processing Systems** 3 2 4

Fundamental concepts and operational principles of data processing systems. Various data processing machines and their operation are introduced.

Prerequisite: None F,W

EGR 101 **Introduction to Engineering Technology** 3 0 3

An introductory course in the field of engineering technology. The various roles filled by technicians in industry and the opportunities for upward mobility within industry are discussed. The overall objectives of a technical education are discussed.

Prerequisite: None F

ELC 1104 **Electrical Blueprint Reading I** 1 3* 2

The basic study of building structures using schematics, diagrams, blueprints, in association with the N.E.C. and N.C. State building code and local ordinances.

Prerequisite: None F,SS

ELC 1105 **Electrical Blueprint Reading II** 1 3* 2

Advanced study of schematics, diagrams, and blueprints in association with N.E.C.

Prerequisite: ELC 1104 or permission of instructor F,W

ELC 1112 **Electricity I** 4 12* 8

A.C. and D.C. power principles, circuitry, for example, series, parallel, and series-parallel. Applications to motors, generators, batteries, and conductors. Introduction to practical applications of electricity.

Prerequisite: None F

ELC 1113 **Electricity II** 5 15* 10

A.C. systems, circuitry, operation, maintenance and repair. Single phase and three phase systems, i.e., motors, controllers, transformers, and applicances. Practical application included.
Prerequisite: ELC 1112 or permission of instructor W

ELC 1124 **Residential Wiring** 4 12* 8

Planning, layout, installation, and maintenance of residential electrical systems in relation to the N.E.C. Appliance installation and maintenance. Troubleshooting residential systems. On the job training.
Prerequisites: ELC 1113 and ELC 1105 S

ELC 1125 **Commercial and Industrial Wiring** 4 12* 8

Provides instruction and application in the fundamentals of blueprint reading, planning, layout, and installation of wiring in commercial and industrial applications such as services, switchboards, lighting, fusing, wire sizes, branch circuits, conduits, and N.E.C. regulations in actual building mock-ups.
Prerequisites: ELC 1113, ELC 1105, ELN 1118 SS

ELC 1201 **Electricity I, Part 1** 2 6* 4

First Part of ELC 1112
Prerequisite: None F

ELC 1202 **Electricity I, Part 2** 2 6* 4

Continuation of ELC 1201. Second part of ELC 1112
Prerequisite: ELC 1201 or instructor's permission W

ELC 1203 **Electricity II, Part 1** 3 9* 6

First part of ELC 1113
Prerequisite: ELC 1202 or instructor's permission S

ELC 1204 **Electricity II, Part 2** 2 6* 4

Continuation of ELC 1203. Second part of ELC 1113.
Prerequisite: ELC 1203 or instructor's permission SS

ELC 1205 **Residential Wiring, Part 1** 2 6* 4

First Part of ELC 1124
Prerequisites: ELC 1201, 1202, 1203, and 1204 F

ELC 1206 **Residential Wiring, Part 2** 2 6* 4

Continuation of ELC 1205. Second part of ELC 1124.
Prerequisite: ELC 1205 W

ELC 1207 **Commercial and Industrial Wiring, Part 1** 2 6* 4

First Part of ELC 1125.
Prerequisites: ELC 1201, 1202, 1203, 1204, ELN 1118, and ELC 1105 S

ELC 1208 **Commercial and Industrial Wiring, Part 2** 2 6* 4

Continuation of ELC 1207. Second part of ELC 1125.
Prerequisite: ELC 1207 SS

ELN 1118 **Industrial Electronics I** 2 6* 4

Basic review of electrical circuits and measuring equipment, exploration of the limits and capabilities of test equipment. Basic theory and operating

characteristics of solid state diodes. The application of basic theory to power supplies and special diode circuits.
Prerequisites: ELC 1113 and MAT 1116 or ELC 1203 and ELC 1204 W,S

ELN 1119 **Industrial Electronics II** 2 6* 4
Basic theory and operating characteristics of transistors, thyristors, and vacuum tubes. Basic linear and switching circuits. Applications of transducers and servo systems. Special devices, linear and digital integrated circuits.
Prerequisite: ELN 1118 SS

ENG 100 **Elementary Composition and Rhetoric** 5 0 5
An introduction to the various types of expository essays and to the basic principles of research writing. A grade of C or higher in this course fulfills the English Proficiency requirement for teaching majors. (Same as Appalachian State University's ENG 1000)
Prerequisite: None F

ENG 101 **Communication Skills I** 3 0 3
Designed to aid the student in the improvement of self-expression in basic communications. Functional approach utilized emphasizing grammar, diction, sentence structure, punctuation, and spelling.
Prerequisite: None F,W

ENG 102 **Communication Skills II** 3 0 3
Designed to develop additional skills in written communications. Practice is provided for student in gathering, organizing, and presenting expository material with emphasis upon the paragraph and short compositions. A graduated scale of activities to develop confidence in written communications necessary in social, business, and industrial situations is presented.
Prerequisite: ENG 101 W,S

ENG 103 **Report Writing** 3 0 3
The fundamentals of English are utilized as a background for the organization and techniques of modern report writing. Exercises in developing typical reports, using writing techniques and graphic devices are completed by the students. Practical application in the preparation of a full-length report is required of each student at the end of the term. This report must have to do with something in his chosen curriculum.
Prerequisite: ENG 102 S

ENG 110 **Introduction to Literature** 5 0 5
Analysis of fiction, poetry, and drama. Continued emphasis on composition through literary essays. (Same as Appalachian State University's ENG 1100)
Prerequisite: ENG 100 S

ENG 121 **Practice in Printed Communications I** 0 4 2
A survey of the practical aspects of preparing information for print media. Students will actually write, visualize, and work with print shops in producing publications on a regular basis. Blue Ridge Technical Institute's student newspaper and yearbook will be class projects.
Prerequisite: None F

ENG 122 **Practice in Printed Communications II** 0 4 2
A continuation of Practice in Printed Communications I, with special emphasis on money management and publication distribution requirements.
Prerequisite: None W

ENG 200 **Oral Communications** 3 0 3

A study of basic concepts and principles of oral communications to enable the student to communicate with others. Emphasis is placed on the speaker's attitude, improving diction, voice, and the application of particular techniques of theory to correct speaking habits to produce effective oral presentation. Particular attention given to conducting meetings, conferences, and interviews.

Prerequisite: ENG 101 F

ENG 201 **English Literature** 5 0 5

A study of major writers from the beginning of British literature through the eighteenth century (Same as Appalachian State University's ENG 2010)

Prerequisite: ENG 110 F

ENG 202 **English Literature** 5 0 5

A study of major British writers from the Romantics through the present. (Same as Appalachian State University's ENG 2020)

Prerequisite: ENG 110 S

ENG 206 **Business Communications** 3 0 3

Develops skills in techniques in writing business communications. Emphasis placed on writing action-getting sales letters; on letters involving credit, collections, adjustments, complaints, acknowledgements, remittances, and inquiries; and on writing business reports and summaries of business conferences.

Prerequisite: ENG 102 SS

ENG 1101 **Basic Communications I** 3 0 3

Integrated communications program designed to strengthen reading comprehension, vocabulary, listening skills, and writing skills. Reading laboratory, listening equipment and materials, and individual instruction are utilized.

Prerequisite: None W,S,SS

ENG 1102 **Basic Communications II** 3 0 3

Continuation of training in basic communication skills with increased emphasis upon special speaking and writing skills needed in the student's specialty area. Included in study are shop forms, job orders, basic business letters, and job application forms.

Prerequisite: ENG 1101 SS

FRE 101 **Elementary French** 5 2 5

Understanding, speaking, reading and writing French. Audiolingual techniques are combined with required recording-listening practice in the language laboratory. Open to those with no previous preparation in French or those who make a low score on the French placement test. Recitation five hours and laboratory two hours a week. (Same as Appalachian State University's FRE 1010)

Prerequisite: None F

FRE 102 **Elementary French** 5 2 5

A continuation of FRE 101. (Same as Appalachian State University's FRE 1020)

Prerequisite: FRE 101 W

FRE 104 **Intermediate French** 5 2 5

Intensive grammar review and training in understanding, speaking, reading

and writing French. Prerequisite: two units of high school French and a good score on the French placement test, or FRE 1010-1020, or the equivalent. Recitation five hours and laboratory two hours a week. (Same as Appalacian State University's FRE 1040)
Prerequisite: FRE 102 W

FRE 105 **Intermediate French** 5 2 5
A continuation of FRE 104. (Same as Appalachian State University's FRE 1050)
Prerequisite: FRE 104 S

GEO 101 **Introduction to Spatial Science** 5 0 5
Geography is a spatial science concerned with exploring the interrelatedness of physical and cultural phenomena distributed in earth space. This course is designed to introduce the student to the discipline of geography and to develop competency in the use of basic techniques and tools whereby man's spatial dimension of existence may be analyzed. (Same as Appalachian State University's GHY 1010)
Prerequisite: None F

HIS 110 **World Civilization** 5 0 5
An introduction to the development of world civilizations from ancient times to the eighteenth century. Selected topics trace the ancient, medieval, and early modern periods with stress on western ideas and institutions. (Same as Appalachian State University's HIS 1101)
Prerequisite: None W

HIS 111 **World Civilization** 5 0 5
An introduction to the development of world civilization from the eighteenth century to the present. Emphasis is placed on the revoluntionary epoch, the age of industrialization, imperialism, and ideology, and the modern global society. (Same as Appalachian State University's HIS 1102)
Prerequisite: None S

HOR 150 **Principles of Horticulture** 5 2 6
A course dealing with horticulture principles and the application of plant science fundamentals to horticulture practices.
Prerequisite: AGR 170 or equivalent background in biology or botany S

HOR 152 **Plant Propagation** 3 2 4
A course dealing with the fundamental principles involved in plant propagation with emphasis in the practical knowledge of useful techniques for propagating plants.
Prerequsite: AGR 170 or equivalent background in biology or botany. W

HOR 250 **Small Fruits and Vegetables** 5 2 6
A study of the fundamentals of small fruit and vegetable production. Varieties, new methods of production and care, and marketing aspects will be covered.
Prerequisite: AGR 170 or equivalent background in biology or botany S

HOR 251 **Plant Materials** 5 4 7
Identification, adaption, and use of ornamental, fruit and shade plants.
Prerequisite: HOR 150 SS

HOR 252 **Advanced Fruit Physiology** 3 2 4
An analysis including current research on production practices, hormones,

fertilizers and growth regulators and their influence on quality and marketability of fruits.
Prerequisites: AGR 185, AGR 170, or equivalent S

HOR 253 **Arboriculture** 3 2 4
Principles and practices of selection, use, establishment, and care of shade and ornamental trees.
Prerequisite: HOR 150 or equivalent background in horticulture W

HOR 257 **Nursery Management** 3 2 4
Retail and wholesale nursery practices. Layouts, selling, handling of plant materials. Commercial nursery stock production dealing with plant growth patterns and plant responses in relation to soils, water, fertility, planting techniques and distances, top and root pruning. Plant production cycles, rotations, and kind of treatment for economy production.
Prerequisite: HOR 150 or equivalent background in horticulture S

HOR 264 **Greenhouse Management** 3 2 4
Fundamentals of and practice in greenhouse plant production.
Prerequisite: HOR 150 or equivalent background in horticulture W

HOR 267 **Planting Plans** 3 2 4
A basic course in planting design. Various plans will be developed depending upon the individual goals of each student.
Prerequisite: None W

HOR 266 **Tree Pruning and Repair** 3 2 4
A basic course in pruning and tree repair principles and techniques. Special emphasis is given to pruning and repair of apple trees. Climbing and ladder work are included as laboratory experience.
Prerequisite: HOR 150 or equivalent background in horticulture W

ISC 104 **Methods Engineering** 4 0 4
Study of the development of manufacturing methods. Process analysis charts, flow charts, and routine sequence charts used. Detailed development of work stations stressed.
Prerequisite: None S

ISC 120 **Principles of Industrial Management** 4 0 4
The basic managerial decisions; organizational structure including plant location, building requirements, and internal factory organization; problems of factory operation and control, planning scheduling, routing factory production, stores control, labor control, purchasing, cost control. Plant problems are utilized as lab experiments.
Prerequisite: None F

ISC 201 **Industrial Safety** 2 0 2
Problems of accidents and fire in industry. Management and supervisory responsibility for fire and accident prevention. Additional topics cover accident reports and the supervisor; good housekeeping and fire prevention; machine guarding and personnel protective equipment; state industrial accident code and fire regulations; the first aid department and the line of supervisory responsibility; job instruction and safety instruction; company rules and enforcement; use of safety committees; insurance carrier and the

Insurance Rating Bureau; and advertising and promoting a good safety and fire prevention program.
Prerequisite: None S,SS

ISC 202 **Quality Control** 4 2 5
Principles and techniques of quality control and cost saving. Organization and procedure for efficient quality control. Functions, responsibilities, structure, costs, reports, personnel and vendor-customer relationships in quality control. Sampling inspections, process control and tests for significance are covered.
Prerequisite: MAT 100 S

ISC 203 **Plant Layout** 2 2 3
A practical study of factory planning with emphasis on the most efficient arrangements of work areas to achieve lower manufacturing costs. Calculation of machinery, equipment, and personnel services required for a given level of production. Layouts for small and medium-sized materials handling equipment. Effective management of people, money and materials in a manufacturing operation.
Prerequisite: None F

ISC 208 **Production Planning** 4 0 4
Day-to-day plant direction; forecasting, product planning and control scheduling, dispatching, routing, and inventory control. Case histories are discussed in the classroom and courses of corrective action are developed. Drafting room layout for planning and control.
Prerequisite: MAT 100 W

ISC 216 **Time and Motion Study** 4 2 5
Principles of motion analysis and work simplification are introduced. Development of standard time data through use of time study techniques, skill and effort rating, ratio-delay studies, predetermined time systems and statistical analysis.
Prerequisite: MAT 202 SS

MAT 100 **Technical Mathematics I** 5 0 5

Fundamental algebraic operations introduced; basic operations with signed numbers, linear equations, fractions and fractional equations, simultaneous linear equations, formula rearrangement, plotting equations on the coordinate axes, and basic slide rule operations.

Prerequisite: None F

MAT 101 **Introduction to Mathematics** 6 0 6

The primary purpose is the development of mathematical literary to a minimum level adequate for the functioning of the average citizen of modern society. It is designed to develop appreciation for mathematical concepts and thought from several different viewpoints. Topics covered will include elementary set theory and elementary logic. The opportunity is offered for the student to select certain topics to strengthen his own mathematical weaknesses. Not open to students who have credit for MAT 1110. (Same as Appalachian State University's MAT 1010)

Prerequisite: None F

MAT 102 **Technical Mathematics II** 5 0 5

Topics covered include: Powers, radicals and related equations; principles involved in the solution of radical and quadratic equations; relationship between fractional exponents and radicals; concepts of slope, intercept and slope intercept forms of linear equations; and evaluating and rearranging logarithms and exponential formulas.

Prerequisite: MAT 100 W

MAT 103 **Technical Mathematics III** 5 0 5

Topics covered include: basic trigonometric concepts, solution of right triangle problems; use of the law of sines and law of cosines, the sine and cosine waves; and vectors.

Prerequisite: MAT 102 S

MAT 104 **Review of Mathematics** 4 0 4

Fundamental algebraic operations introduced; basic operations with signed numbers, linear equations, simultaneous linear equations, formula rearrangement. Review of basic plane geometry. Basic slide rule operations. Plotting equations on the coordinate axes.

Prerequisite: None F

MAT 107 **Algebra and Trigonometry** 6 0 6

An integrated study of algebra and trigonometry including such topics as the real and complex number systems, algebraic relations and functions, trigonometric functions, and elementary theory of equations. (For the student who wishes to strengthen his background in the computational aspects of the mathematics he began in high school.) Not open to students who have credit for MAT 1110. (Same Appalachian State University's MAT 1020)

Prerequisite: MAT 101 or equivalent W

MAT 110 **Business Mathematics** 5 0 5

This course stresses the fundamental operations and their application to business problems. Topics covered include payrolls, price marking, interest and discount, commission, taxes, and pertinent uses of mathematics in the field of business.

Prerequisite: None F,W

MAT 111 **Calculus With Analytic Geometry I** 6 0 6

A study of limits, continuity, differentiation, applications of the derivative, the differential, and antiderivatives. (Same as Appalachian State University's MAT 1110)

Prerequisite: MAT 107 S

MAT 112 **Advanced Algebra** 4 0 4

Topics covered include exponents and radicals, quadratic equations, and the quadratic formula.

Prerequisite: MAT 104 W

MAT 113 **Basic Trigonometry** 4 0 4

Solution of right and oblique triangles. Plotting of trigonometric functions.

Prerequisite: MAT 112 S

MAT 201 **Applications in Trigonometry** 4 0 4

Use of basic trigonometry in practical applications such as machine design problems, measurement and layout problems, surveying, resolution of forces, vector analysis of forces, vector analysis.

Prerequisite: MAT 113 SS

MAT 202 **Applied Statistics** 4 0 4

An introduction to statistics, including collection and tabulation of data, analysis, standard deviation, significance, and correlation. Emphasis on sampling techniques and errors. Application to industrial problem analysis stressed.

Prerequisite: MAT 113 F

MAT 203 **Technical Mathematics IV** 5 0 5

Use of mathematics in practical applications, design problem measurement and layout problems, surveying, and basic statistics.

Prerequisite: MAT 103 SS

MAT 1101 **Fundamentals of Mathematics** 4 0 4

Practical number theory. Analysis of basic operations: addition, subtraction, multiplication and division. Fractions, decimals, powers and roots, percentages, ratio and proportion. Plane and solid geometric figures used in industry; measurement of surfaces and volumes. Introduction to algebra used in trades. Practice in depth.

Prerequisite: None F

MAT 1103 **Building Trades Mathematics** 4 0 4

Practical problems dealing with volumes, weights, ratios; mensuration; and basic estimating practices for building materials.

Prerequisite: MAT 1101 F

MAT 1112 **Mathematics for Machinist I** 4 0 4

Fundamental properties and definitions; plane and solid geometric figures, selected general theorems, geometric construction, areas and volumes of solids. Geometric principles are applied to shop operations. Layout and measurement applications stressed.

Prerequisite: MAT 1101 or equivalent work in math W

MAT 1113 **Mathematics for Machinists II** 4 0 4

Trigonometric ratios; solving problems with right triangle, using tables, and

interpolating; solution of oblique triangles using law of sines and law of cosines; graphs of the trigonometric functions; inverse functions; trigonometric equations. All topics are applied to practical problems.
Prerequisite: MAT 1112 S

MAT 1114 **Mathematics for Machinists III** 4 0 4
Introduces gear ratio, lead screw and indexing problems with emphasis on application to the machine shop. Practical applications and problems furnish the trainee with experience in geometric propositions and trigonometric relations to shop problems; concludes with an introduction to compound angle problems.
Prerequisite: MAT 1113 S,SS

MAT 1115 **Electrical Math I** 4 0 4
A study of fundamental concepts of algebra; basic operations of addition, subtraction, multiplication, and division; solution of first order equations, use of letters and signs, grouping, factoring, exponents, ratios, and proportions; solution of equations, algebraically and graphically; a study of logarithms and use of tables; an introduction to trigonometric functions and their application to right angles; and a study of vectors for use in alternating current.
Prerequisite: None F

MAT 1116 **Electrical Math II** 4 0 4
Continuation of Electrical Math I with emphasis on practical applications of mathematical principles studied.
Prerequisite: MAT 1115 W

MAT 1117 **Mathematics for Welders** 4 0 4
Fundamental properties and definitions; plane and solid geometric figures, selected general theorems, geometric construction of lines, angles and plane figures. Dihedral angles, areas of plane figures, and volumes of solids are studied. Geometric principles are applied to shop operations.
Prerequisite: MAT 1101 or equivalent. F,W

MEC 101 **Machine Processes I** 3 3* 4
An introductory course designed to acquaint the student with basic hand tools, safety procedures, and machine processes of modern industry. It will include a study of measuring instruments, characteristics of metals, and cutting tools. The student will become familiar with the lathe family of machines tools by performing selected operations such as turning, facing, threading, drilling, boring, and reaming.
Prerequisite: None F

MEC 106 **Machine Processes** 2 2 3
This course acquaints the student with the basic hand and machine operations in a typical machine shop, including theory and practice on bench work, turning, drilling, milling, and grinding. Safety principles stressed.
Prerequisite: None F

MEC 107 **Manufacturing Processes** 4 0 4
This course acquaints the student with the specialized metalworking operations found in a typical manufacturing plant, such as automatic machining and grinding, press work, welding, chemical treating, etc. Basic process en-

gineering calculations such as feeds and speeds and equipment capacity are covered.
Prerequisite: MEC 106 W

MEC 201 **Materials of Industry** 5 0 5
Introductory course in the basic properties of metals and alloys used in industry. Selecting the proper metal for a given use through the use of research methods is emphasized.
Prerequisite: PHY 101 F

MEC 202 **Machine Processes II** 3 3* 4
Advanced operations on lathe. Milling machine theory and practice. Thorough study of the types of milling machines, cutters, job and fixtures devices, precision grinding operations, and the accessories used in a modern industrial plant. Safety in the operational shop is stressed.
Prerequisite: MEC 101 W

MEC 203 **Industrial Materials** 4 0 4
Basic course in basic properties of metals, alloys, wood, and plastics used in industry. Material selection for various applications is emphasized. Heat treatment of steel and aluminum alloys is stressed.
Prerequisite: None SS

MEC 205 **Strength of Materials** 3 2 4
Study of principles and analysis of stresses which occur within machine and structural elements subjected to various types of loads such as tensile, compressive, torsional, shear, and combinations of these loads. Design of riveted, bolted, and welded joints tudied. Magnitude of bending will also be covered.
Prerequisites: PHY 205 and MAT 203 S

MEC 235 **Hydraulics and Pneumatics** 3 2 4
The basic theories of hydraulic and pneumatic systems. Combinations of systems in various circuits. Basic designs and functions of circuits and motors, controls, electrohydraulic servomechanisms, plumbing, filtration, accumulators, and reservoirs.
Prerequisite: PHY 205 S

MEC 1101 **Machine Shop Theory and Practice I** 3 9* 6
An introduction to the machinists trade and the potential it holds for craftsmen. Deals primarily with the indentification, care and use of basic hand tools and precision measuring instruments. Elementary layout procedures and processes of lathe, drill press, grinding (off-hand) and milling machines will be introduced both in theory and practice.
Prerequisite: None F

MEC 1102 **Machine Shop Theory and Practice II** 4 12* 8
Advanced operations in layout tools and procedures, power sawing, drill press, surface grinder, milling machine shaper. The student will be introduced to the basic operations on the cylindrical grinder and will select projects encompassing all the operations, tools, and procedures thus far used and those to be stressed throughout the course.
Prerequisite: MEC 1101 or permission of instructor W

MEC 1103 **Machine Shop Theory and Practice III** 4 12* 8
Advanced work on the engine lathe, turning, boring and threading machines,

grinders, milling machine and shaper. Introduction to basic indexing and terminology with additional processes on calculating, cutting and measuring of spur, helical, and worm gears and wheels. The trainee will use precision tools and measuring instruments such as vernier height gages, protractors, comparators, etc. Basic exercises will be given on the turret lathe and on the tool and cutter grinder.
Prerequisite: MEC 1102 or permission of instructor S

MEC 1104 **Machine Shop Theory and Practice IV** **4 12* 8**
Development of class projects using previously learned procedures in planning, blueprint reading, machine operations, final assembly and inspection. Additional processes on the turret lathe, tool and cutter grinder, cylindrical and surface grinder, advanced milling machine operations, etc. Special procedures and operations, processes and equipment, observing safety procedures faithfully and establishing of good work habits and attitudes acceptable to the industry will be covered.
Prerequisite: MEC 1103 SS

MEC 1107 **Pump Repair and Maintenance** **2 6* 4**
A study of various types of pumps and controls including air, hydraulic, and water. The student will lean to disassemble, inspect and reassemble, replace worn parts, lubricate and perform minor repairs.
Prerequisite: None W

MEC 1112 **Machine Shop Processes for Welders** **2 6* 4**
To acquaint the student with the procedures of layout work and the correct use of hand and machine tools. Experiences in the basic fundamentals of drill press and lathe operation; hand grinding of drill bits and lathe tools; set-up work applied to the trade.
Prerequisite: None SS

MEC 1115 **Metallurgy I** **1 3* 2**
Investigates the properties of ferrous metals and tests to determine their uses. Instructions will include some chemical metallurgy to provide a background for the understanding of the physical changes and causes of these changes in metals. Physical metallurgy of ferrous metals, producing iron and steel, theory of alloys, shaping and forming, heat treatments for steels, and cast iron will be topics for study.
Prerequisite: None S

MEC 1116 **Metallurgy II** **1 3* 2**
Continuation of the study of physical metallurgy. The nonferrous metals: bearing metals (brass, bronze, lead), light metals (aluminum and magnesium), and copper and its alloys are studied. Power metallurgy, titanium, zirconium, indium and vanadium are included in this course.
Prerequisite: MEC 1115 SS

MEC 1127 **Basic Hydraulics and Pneumatics** **2 6* 4**
A broad, general and practical coverage of hydraulics pneumatics principles, applicable components and their design, application and operation. Standard symbols and diagrams used in connection with hydraulic and pneumatic systems are covered.
Prerequisite: None F

MEC 1201 **Machine Shop I** **2 6* 4**
Introductory course to the machinist trade. Identification, care, and use of

basic hand tools and precision measuring instruments covered. Elementary layout procedures and processes of lathe, drill press, grinding (off-hand) and milling machines will be introduced both in theory and practice.
Prerequisite: None F

MEC 1202 **Machine Shop II** 2 6* 4
Additional operations in layout tools and procedures. Power sawing, drill press, surface grinder, and milling machine shaper are introduced.
Prerequisite: MEC 1201 or permission of instructor W

MEC 1203 **Machine Shop III** 2 6* 4
Advanced work on the engine lathe; turning; boring, and threading machines; grinders; milling machine and shaper. Basic exercises will be given on the turret lathe and on the tool and cutter grinder.
Prerequisite: MEC 1201 or permission of instructor S

MEC 1204 **Machine Shop IV** 2 6* 4
Development of project using previously learned procedures in planning, blueprint reading, machine operations, final assembly, and inspection.
Prerequisite: MEC 1203 or permission of instructor SS

MEC 1205 **Drive Components** 2 6* 4
The student will learn the function, construction, and operation of different drive components used with industrial machinery. Also covered will be application, installation, maintenance, and lubrication.
Prerequisite: None S

MEC 1206 **Industrial Safety** 4 0 4
Designed to familiarize the student with methods of job-safety analysis, plant inspection, plant housekeeping and maintenance, and the handling of equipment. Field-proven methods for promoting safe practices, methods of safety education and training, standards and rules and fundamentals of industrial accident first-aid.
Prerequisite: None SS

MEC 1207 **Preventive and System Maintenance** 1 3* 2
A study of system maintenance scheduling, cleaning and lubrication of various system components, replacement of parts, routine inspection, trouble shooting, and calibration.
Prerequisite: None SS

MEC 1208 **Hydraulic and Pneumatic Troubleshooting** 2 6* 4
A follow-up course to Basic Hydraulics and Pneumatics. Will study schematic diagrams and learn maintenance and troubleshooting techniques for various equipment.
Prerequisite: MEC 1127 or permission of instructor SS

MUS 201 **Introduction to Music** 5 0 5
A nontechnical course designed for students with little or no musical background. Emphasis is placed on the style and form of music as perceived by the listener. (Same as Appalachian State University's MUS 2011)
Prerequisite: None W

NUR 1101 **Fundamentals of Basic Nursing** 9 6* 3* 12
The following principles basic to effective and safe nursing care are covered:

body mechanics for nurse and patient, sterilization and disinfection methods, use of hospital equipment, and techniques of daily hygenic patient care. Laboratory practice includes beginning skills and hygenic care of the dependent patient.
Prerequisite: None F

NUR 1102 **Body Structure and Function** 5 2 0 6
Thorough study of general plan of the body including the nervous, endocrine, skeletal, muscular, circulatory, digestive, respiratory, urinary, and reproductive systems. Body control of functions of distribution of food and oxygen, waste removal, and provisions for survival are covered.
Prerequisite: None F

NUR 1103 **Vocational Adjustments** 2 0 0 2
Intrepretation of the role of the practical nurse with emphasis on historical background in nursing. Legal and ethical responsibilities of the Licensed Practical Nurse, opportunities of employment and obligations assumed upon employment are covered. Membership eligibility and benefits of professional nursing organizations are discussed.
Prerequisite: None F

NUR 1104 **Medical-Surgical Nursing I** 4 2 0 5
Study of material basic to development of understanding of nursing care of patients with common illness problems. Processes of illness, diagnostic tests, physiologic reaction to pain, needs of patients with long-term illness, rehabilitation, pre- and post-operative needs, anesthesia agents, and modification of diet of disease conditions are presented.
Prerequisites: NUR 1101, NUR 1102, NUR 1103, and PSY 1101 W

NUR 1105 **Maternity Nursing I** 2 0 0 2
Study of modern aspects of maternity nursing with emphasis on normal pregnancy, patient needs during antepartal care period, during labor and delivery, and needs of the normal newborn.
Prerequisites: NUR 1101, NUR 1102, NUR 1103, and PSY 1101 W

NUR 1106 **Pediatric Nursing I** 2 0 0 2
Study of normal child growth and development and nursing needs of the child hospitalized for common or sub-acute illness.
Prerequisites: NUR 1101, NUR 1102, NUR 1103, and PSY 1101 W

NUR 1107 **Pharmacology** 2 0 0 2
Knowledge and skills necessary for preparing and giving oral and injectable medications are introduced. Sterile techniques used in preparation and giving of injections covered. Selected classes of drugs studied as to actions and responses. Study of source, effects, etc., is provided with each unit in medical-surgical, maternity, and pediatric nursing.
Prerequisites: NUR 1101, NUR 1102, NUR 1103, and PSY 1101 W

NUR 1108 **Clinical Experience I** 0 0 18* 6
Provides experience in the affiliating hospital in the nursing care of selectsary to meet the needs of the more independent patent.
Prerequisites: NUR 1101, NUR 1102, NUR 1103, and PSY 1101 W

NUR 1109 **Medical-Surgical Nursing II** 6 0 0 6
Continuation of NUR 1104. Additional experiences to develop skills necessary to meet the needs of the more dependent patient.
Prerequisites: All second quarter courses S

NUR 1110 **Maternity Nursing II** 3 0 0 3

Continuation of NUR 1105. Study of complications of the maternity patient and the related nursing care. Abnormalities or disorders of the newborn and their related nursing care are also introduced.

Prerequisites: All second quarter courses S

NUR 1111 **Pediatric Nursing II** 3 0 0 3

Continuation of NUR 1106. Knowledge and skills needed in meeting needs of the acutely ill child are covered.

Prerequisites: All second-quarter courses S

NUR 1112 **Clinical Experience II** 0 0 18* 6

Provides nursing care experience with selected patients. Correlated with classroom theory.

Prerequisites: All second quarter courses S

NUR 1113 **Medical-Surgical Nursing III** 7 2 0 8

Continuation of NUR 1104 and NUR 1109. Selected nursing care experience of patients with various disorders. Includes care of more critically or seriously ill patients, expands role of the LPN as an assistant to the RN, and covers LPN role in disaster or emergency nursing.

Prerequisites: All third quarter courses SS

NUR 1114 **Clinical Experience III** 0 0 18* 6

Experience in the care of critically or seriously ill patients. Functioning in the role of an assistant is emphasized. Experience in the administratiion of medication is provided under the direct supervision of the clinical instructor.

Prerequisites: All third quarter courses SS

PHS 100 **Physical Science** 3 3 5

An introduction to the concepts of matter and energy and their interactions. The topics chosen are based on those suggested by the N.C. State Department of Public Instruction to be included in the curriculum of primary and elementary science classes. This course is structured principally to meet physical science requirements for primary and elementay majors. Sections labeled K-3 are open only to primary education majors. Other non-science majors may elect those sections designated 4-9 to fulfill general college science requirements. Lecture three hours, laboratory three hours. (Same as Appalachian State University's PHS 1001)

Prerequisite: None F

PHS 101 **Physical Science** 3 3 5

A continuation of PHS 100. (Same as Appalachian State University's PHS 1002)

Prerequisite: PHS 100 S

PHY 101 **Physics: Properties of Matter** 3 2 4

A fundamental course covering several basic principles of physics. The divisions included are solids and their characteristics, liquids at rest and in motion, gas laws and applications. Laboratory experiments and specialized problems dealing with these topics are part of this course.

Prerequisite: None W

PHY 102 **Physics: Work, Energy, Power** 3 2 4

The major areas covered in this course are work, energy and power. Instruction includes such topics as statics, forces, center of gravity, and dynamics. Units of measurement and their applications are a vital part of this course. A

practical approach is used in teaching students the use of essential mathematical formulas.
Prerequisites: PHY 101 and MAT 100 S

PHY 201 **Physics I** 2 2 3
A fundamental course covering several basic principles of physics, including characteristics of solids, liquids and gases; work energy, and power.
Prerequisite: MAT 100 W

PHY 202 **Physics II** 2 2 3
Study of the principles of heat, light, and sound.
Prerequisite: PHY 201 S

PHY 203 **Physics III** 2 2 3
Study of the principles of electricity, magnetism and electronics.
Prerequisite: PHY 202 SS

PHY 205 **Physics: Electricity** 3 2 4
Basic theories of electricity, types of electricity, methods of production, and transmission and transforming of electricity. Electron theory, electricity by chemical action, electricity by friction, electricity by magnetism, induction voltage, amperage, resistance, horsepower, wattage, and transformers are major subjects studied in this course.
Prerequisites: PHY 102 and MAT 103 SS

PHY 206 **Applied Mechanics** 5 0 5
Concepts and principles of statics and dynamics, resolution of forces, resultants, moments, couples, free-body diagrams, trusses and frames, centroids, moment of inertia, and concepts of force, mass, and acceleration are the main topics.
Prerequisites: MAT 203 and PHY 205 W

PHY 1101 **Applied Science I** 2 2 3
An introductin to physical principles and their application in industry. Topics in this course include measurement; properties of solids, liquids, and gases; principles of force, motion, work, energy, and power.
Prerequisite: None F,S

PHY 1102 **Applied Science II** 2 2 3
The second in a series of two courses of applied physical principles. Topics introduced in this course are heat, thermometry, and basic electrical principles.
Prerequisite: PHY 1101 W,SS

PME 1101 **Internal Combustion Engines** 4 12* 8
Development of a thorough knowledge and ability in using, maintaining, and storing the various hand tools and measuring devices needed in engine repair work. Study of the construction and operation of components of internal combustion engines. Testing of engine performance, servicing and maintenance of pistons, valves, cams and camshafts, fuel and exhaust systems, cooling systems, proper lubrication, and methods of testing, diagnosing and repairing.
Prerequisite: None F

PME 1102 **Engine Electrical and Fuel Systems** 4 12* 8
A thorough study of the electrical and fuel systems of the automobile. Battery cranking mechanism, generator, ignition, accessories and wiring; fuel

pumps, carburetors, and fuel injectors. Characteristics of fuels, types of fuel systems, special tools, and testing equipment for the fuel and electrical system.
Prerequisite: None W

POL 110 **American National Government and Politics** 5 0 5
A study of the development and operation of the American National government, its powers organization and policies. (Same as Appalachian State University's PS 1100)
Prerequisite: None F

PSY 100 **Self Development** 2 2 3
Designed to develop effective individual study habits and other educational skills as needed in an individual student's curriculum.
Prerequisite: None F,SS

PSY 206 **Applied Psychology** 3 0 3
A study of the principles of psychology that will be of assistance in the understanding of inter-personal relations on the job. Motivation, feelings, and emotions are considered with particular reference to on-the-job problems. Other topics investigated are: employee selection, supervision, job satisfaction, and industrial conflicts. Attention is also given to personal and group dynamics so that the student may learn to apply the principles of mental hygiene to his adjustment problems as a worker and a member of the general community.
Prerequisite: None SS

PSY 207 **Professional Secretarial Development** 3 0 3
Designed to assist the student in recognizing the importance of personality, charm, grooming, poise, and emotions in becoming a professional secretary. Job interview procedures, human and public relations, and various methods of personal improvement are covered.
Prerequisite: None W

PSY 1101 **Human Relations** 3 0 3
A study of basic principles of human behavior. The problems of the individual are studied in relation to society, group membership, and relationships, within the work situation.
Prerequisite: None F,S

SOC 220 **Introduction to Sociology** 5 0 5
An introduction to the field of sociology. How society and its component parts are structured; analysis of the structure and function of social institutions and groups; relationships of the individual to society. (Same as Appalachian State University's SOC 2201).
Prerequisite: None W

SOC 201 **Social Science I** 3 0 3
An integrated course in the social sciences, drawing from the field of anthropology, psychology, history, and sociology.
Prerequisite: None S,SS

SOC 202 **Social Science II** 3 0 3
A further study of social sciences with emphasis on economics, political science, and social problems as they relate to the individual.
Prerequisite: None F,S

SOC 203 **Marriage and the Family** 3 0 3

A study of dating relationships and preparation for marriage, continuing to an examination of the marriage process, stressing individual responsibility in making marrage and parenthood meaningful.

Prerequisite: None W,S

WLD 1001 **Welding I** 2 6* 4

General welding procedures including shop safety, shop procedures, and care of equipment are covered. Emphasis on oxyacetylene welding and cutting including types of regulators, cylinders, torches, tips, setting up equipment and regulating flame, welding symbols, running beads, tacking, butt welds, and outside corner welds.

Prerequisite: None F

WLD 1101 **Basic Welding I** 1 3* 2

Welding demonstrations by the instructor and practice by students in the welding shop. Safe and correct methods of assembling and operating the welding equipment. Practice will be given for surface welding, bronze welding, silver soldering, and flamecutting methods applicable to mechanical repair work.

Prerequisite: None F,W

WLD 1102 **Welding II** 2 6* 4

Instruction is designed to acquaint student with basics of arc and inert gas welding. Experience in welding various types of metals, and practice in the selection of the correct type of rod for each job is covered. Basic layout procedures in welding also covered.

Prerequisite: None W

WLD 1105 **Welding III** 2 6* 4

Designed to provide practice in the welding of pressure piping in the horizontal fixed position using latest pipe welding methods.

Prerequisite: WLD 1102 or equivalent experience S

WLD 1106 **Auto Body Welding** 1 3* 2

Taught in conjunction with AUT 1112, the welding skills gained in WLD 1101 are used to repair tears or cracks in sheet metal, patch panels or cut and replace damaged panels. Frames are also repaired using panels to reinforce weak or damaged areas.

Prerequisite: WLD or equivalent experience F

WLD 1112 **Mechanical Testing and Inspection** 1 3* 2

The standard methods for mechanical testing of welds are covered. The student is introduced to the various types of tests and testing procedures and performs the details of the test which will give adequate information as to the quality of the weld. Types of tests to be covered are: bend, destructive, free-bend, guided-bend, nick-tear, notched-bend, tee-bend, nondestructive, V-notch, Charpy impact, etc.

Prerequisite: WLD 1120 and WLD 1121 or WLD 1201, 1202, 1203, 1204 W,S

WLD 1120 **Oxyacetylene Welding and Cutting** 4 12* 8

Introduction to the history of oxyacetylene welding, the principles of welding and cutting, nomenclature of the equipment, assembly of units. Welding procedures such as practice of puddling and carrying the puddle, running flat beads, butt welding in the flat vertical and overhead position, brazing,

hard and soft soldering. Safety procedures in the use of tools and equipment are stressed throughout the program of instruction. Students perform mechanical testing and inspection to determine quality of the welds.
Prerequisite: None F

WLD 1121 **Arc Welding** 4 12* 8

The operation of AC transformers and DC motor generator arc welding sets studied. Studies are made of welding heats, polarities and electrodes for use in joining various metal alloys by the arc welding process. After the student is capable of running beads, butt and fillet welds in all positions are made and tested in order that the student may detect his weaknesses in welding. Safety procedures are emphasized throughout the course in the use of tools and equipment.
Prerequisite: None W

WLD 1122 **Commercial and Industrial Practices** 3 9* 6

Designed to build skills through practices in simulated industrial processes and techniques; sketching and laying out on paper the size and shape description, listing the procedure steps necessary to build the product, and then actually following these directions to build the product. Emphasis is placed on maintenance, repairing worn or broken parts by special welding application, field welding, and nondestructive tests and inspection.
Prerequisite: WLD 1120, WLD1121, and WLD 1124 or WLD 1201, 1202, 1203, 1204, 1205, 1206 S,SS

WLD 1123 **Inert Gas Welding** 1 3* 2

Introduction and practical operations in the use of inert-gas-shield arc welding. A study will be made of the equipment, operation, safety, and practice in the various positions. A thorough study of such topics as: principles of operation, shielding gases, filler rods, process variations and applications, manual and automatic welding.
Prerequisites: WLD 1120 and WLD 1121 or WLD 1201, 1202, 1203, 1204 W,S

WLD 1124 **Pipe Welding and Pipe Fitting** 4 12* 8

Designed to provide practice in the welding of pressure piping in the horizontal, vertical, and horizontal fixed position using shielded metal arc welding processes according to Sections VIII and IX of the ASME Code. Special emphasis placed on developing pipe and angle layouts by use of patterns and templates.
Prerequisites: MAT 1117 and WLD 1121 S

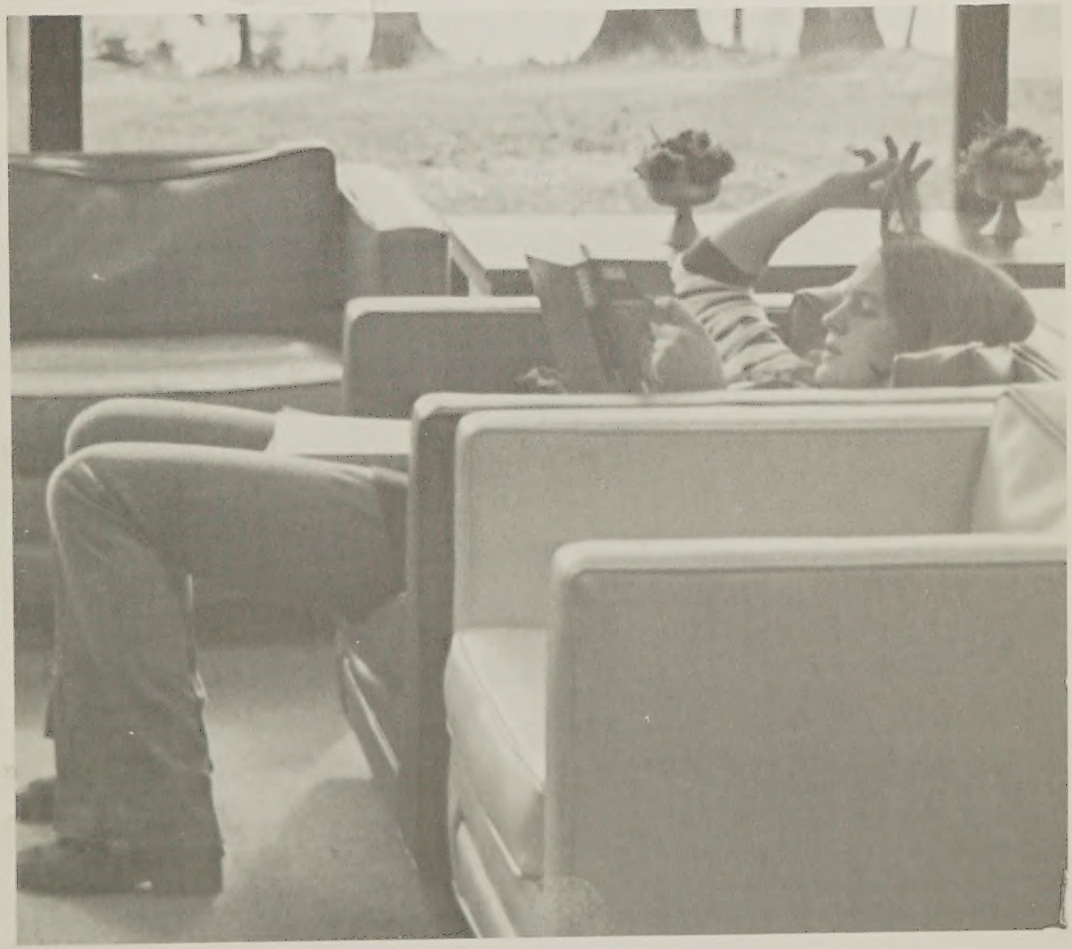
WLD 1125 **Certification Practices** 1 3* 2

This course involves practice in welding the various materials to meet certification standards. The student uses various tests including the guided bend and the tensile strength tests to check the quality of his work. Emphasis is placed on attaining skill in producing quality welds.
Prerequisites: WLD 1120, WLD 1121, WLD 1123, WLD 1124, or WLD 1201, 1202, 1203, 1204, 1205, and 1206 SS

WLD 1201 **Oxyacetylene Welding and Cutting, Part 1** 2 6* 4

First part of WLD 1120.
Prerequisite: None F

WLD 1202	**Oxyacetylene Welding and Cutting, Part 2** A continuation of WLD 1201. Second part of WLD 1120. Prerequisite: WLD 1201	2	6*	4 W
WLD 1203	**Arc Welding, Part 1** First part of WLD 1121. Prerequisite: None	2	6*	4 S
WLD 1204	**Arc Welding, Part 2** A continuation of WLD 1203. Second part of WLD 1121. Prerequisite: WLD 1203	2	6*	4 SS
WLD 1205	**Pipe Welding and Pipe Fitting, Part 1** First part of WLD 1124. Prerequisites: WLD 1203, 1204, MAT 1117	2	6*	4 F
WLD 1206	**Pipe Welding and Pipe Fitting, Part 2** A continuation of WLD 1205. Second part of WLD 1124 Prerequisites: WLD 1205, MAT 1117, WLD 1203, 1204	2	6*	4 W



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